

#### Chilco Lake Lumber Company, LLC

September 30, 2005

Mr. William Rogers, Title V Permit Coordinator Idaho Dept. of Environmental Quality 1410 North Hilton Boise, ID 83706-1255

Re:

Tier 1 Permit Application for Chilco Lake Lumber Co., LLC dba Riley Creek Chilco Sawmill, P-050116, Kootenai County

Dear Mr. Rogers:

Riley Creek Lumber Co. is pleased to submit the enclosed Tier 1 Operating Permit Application as required by IDAPA 58.01.01.313.b.

Based on information and belief formed after reasonable inquiry, the statements and information in these documents are true, accurate, and complete. If you have any technical questions about this application, please contact Riley Creek's Environmental Manager, Glenda Empsall 208-772-0505 extension 438, or cell 208-661-2644.

Sincerely.

Marc A. Brinkmeyer,

President

CC:

Mr. Tom Harman, Air Quality Program Manager **Idaho Department of Environmental Quality** 2110 Ironwood Parkway Coeur d'Alene, Idaho 83814

Permit No T1-05012-3

Facility 10 10 055-00024

PID: SSTV, V088

Logged: |

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Department of immonmental Quality State An Program

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| 8  | FUGITIVE ROAD DUST SOURCES                          |
| 9  | APPLICABLE REGULATIONS AND COMPLIANCE CERTIFICATION |
| 10 | ADDITIONAL INFORMATION                              |

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# COMPLETENESS DETERMINATION CHECKLIST AND APPLICATION INDEX

| Company Nam   | e Chilco Lake Lumber Compay, LLC - dba Riley Creek - Chilco Sawmill  |
|---------------|--|
| Location      | Athol, Idaho   |
| Project       | Tier I Operating Permit Application  |
| Reviewer      |  |
|               | rms have been provided as a checklist and application index, to ensure all the required been included with the air pollution permit application. These forms shall be submitted pplication. These checklist/index forms include the following elements of the permit |
| <b>.</b>      | Application Forms  |
| <b>&gt;</b> , | Source Descriptions  |
| •             | Source Flow Diagrams   |
| •             | Plot Plans   |
| •             | Emission Estimate References and Documentation   |
| •             | Excess Emission Documentation - Not Required   |
| <b>•</b>      | Ambient Air Impact Analysis - Not Required   |
| _             | Compliance Certification Plan  |

Each page of the permit application shall be numbered so that each page can be referenced individually. This will allow these checklist forms to act as the permit application table of contents.

### APPLICATION FORMS

| SECTION | SOURCE   | PAGE  |
|---------|--|---|
| 1       | General Information General Information Description of Site Summary of Process Insignificant Activities Table of Process and Emitting Units Plant Site and Emission Unit Location Map Process Flow Diagram   | 1 - 1<br>1 - 2<br>1 - 2<br>1 - 4<br>1 - 5<br>1 - 6<br>1 - 7   |
| 2       | Fuel Burning Equipment Boiler #1 - Kipper and Sons Boiler Part A Boiler #1 - Kipper and Sons Boiler Part B Boiler Emissions Calculations Boiler HAPS Emissions Calculations  | 2 - 1<br>2 - 2<br>2 - 3<br>2 - 4  |
| 3       | Process and Manufacturing Operations Debarking Part A Debarking Part B Bark Hog Part A Bark Hog Part B Log and Bark Processes Emissions Calculations Sawmill Processes Part A Sawmill Processes Part B Sawmill Processes Emissions Calculations Lumber Drying Kilns Part A Lumber Drying Kilns Part B Lumber Drying Kiln Emissions Calculations Planer Processes Part A Planer Processes Part B Calculated Emissions | 3 - 1<br>3 - 2<br>3 - 3<br>3 - 4<br>3 - 5<br>3 - 6<br>3 - 7<br>3 - 8<br>3 - 9<br>3 - 10<br>3 - 11<br>3 - 12<br>3 - 12 |
| 4       | Waste Incineration No Section 4 forms are included.  |   |
| 5       | Storage and Handling of Liquid Solvents No Section 5 forms are included.   |   |
| 6       | Loading Racks<br>No Section 6 forms are included.  |   |

| APPLICATION FORMS (continued to SECTION ) | nued)<br>SOURCE  |              | <u>PAGE</u>   |
|---|--|--------------|---|
| 7   | Solid Material Transport, Handling, and Sto<br>Hogged Bark Handling Part A<br>Hogged Bark Handling Part B<br>Sawmill Sawdust Handling Part A<br>Sawmill Chip Handling Part A<br>Sawmill Chip Handling Part B<br>Sawmill Process Emissions Calculations, Con<br>Planer Shavings and Chip Handling Part A<br>Planer Processes Emissions Calculations |              | 7 - 1<br>7 - 2<br>7 - 3<br>7 - 4<br>7 - 5<br>7 - 6<br>7 - 7<br>7 - 8<br>7 - 9<br>7 - 10 |
| 8   | Fugitive Road Dust Sources Paved Road Dust Sources Part A Paved Road Dust Sources Part B Paved Road Emission Calculations Unpaved Road Dust Sources Part A Unpaved Road Dust Sources Part B Unpaved Road Emission Calculations   |              | 8 - 1<br>8 - 2<br>8 - 3<br>8 - 4<br>8 - 5<br>8 - 6                                      |
| 9   | Applicable Regulations and Compliance C<br>Idaho Applicable Regulations Checklist<br>Federally Applicable Regulations Checklist<br>Compliance Plan   | ertification | 9 - 1<br>9 - 12<br>9 - 13   |
| 10  | Additional Information Permit No.: P-050116, with attachments  |              |   |
|   |  | <u>YES</u>   | <u>NO</u>   |
| ▶ Is the application sign                 | ed and dated?  |              |   |
| Are all the forms adea                    | quately completed?   |              |   |

### SOURCE DESCRIPTIONS

| <u>SOURCE</u>   | PAGE          |            |
|---|---------------|------------|
| 1. Hog Fuel Boiler  | <u>1 – 3</u>  |            |
| 2. Debarker   | <u>1 – 2</u>  |            |
| 3. Bark Hog   | <u>1 – 2</u>  |            |
| 4. Sawmill Processes  | 1-2           |            |
| 5. Drying Kilns   | <u>1 – 3</u>  |            |
| 6. Planer Processes   | <u>1 – 3</u>  |            |
| 7. Hogged Bark Handling   | 1-2           |            |
| 8. Sawdust Handling   | <u>1 – 2</u>  |            |
| 9. Sawmill Chip Handling  | <u>1 – 2</u>  |            |
| 10. Planer Shavings and Chip Handling   | 1-3           |            |
| 11. Unpaved Road Dust Sources   | <u>NA</u>     |            |
| 12. Paved Road Dust Sources   | <u>NA</u>     |            |
|   |               |            |
|   |               |            |
|   | <u>YES</u>    | <u>NO</u>  |
| Are the existing facilities described?  | <u></u>       |            |
| Are the modifications or new facilities described?                            | <u>NA</u>     | <u>_NA</u> |
| Are all applicable processes, materials, ventilation, and controls described? | <del></del> . |            |
| Are all the equipment referenced by specific ID name<br>or number?            | <u> </u>      |            |

## SOURCE FLOW DIAGRAMS

| <u>SOURCE</u>   | <u>PAGE</u>   |           |
|---|---------------|-----------|
|   | <u>1 – 8</u>  |           |
| 1. Hog Fuel Boiler  | <u>1 – 8</u>  |           |
| 2. Debarker   | <u> </u>      |           |
| 3. Bark Hog   | <del>_</del>  |           |
| 4. Sawmill Processes  | <u>1 – 8</u>  |           |
| 5. Drying Kilns   | <u>1 – 8</u>  |           |
| 6. Planer Processes   | <u>1 – 8</u>  |           |
| 7. Hogged Bark Handling   | <u>1 – 8</u>  |           |
|   | <u>1 – 8</u>  |           |
| 8. Sawdust Handling   | 1 – 8         |           |
| 9. Sawmill Chip Handling  | 1 – 8         |           |
| 10. Planer Shavings and Chip Handling   | <u>NA</u>     |           |
| 11. Unpaved Road Dust Sources   | <del></del> - |           |
| 12. Paved Road Dust Sources   | <u>NA</u>     |           |
|   |               |           |
| •   | <u>YES</u>    | <u>NO</u> |
|   |               |           |
| Are included?   |               |           |
| Shows the entire existing facility?   | <br>NA        | NA _      |
| Shows the entire future facility?   |               |           |
| Shows each process separately (if needed)?  | ,,            |           |
| Details storage, roads, transfers, and processing?  |               |           |
| <ul><li>Labeling is adequate (processes and stacks</li><li>identified, flow rates and process rates shown)?</li></ul> |               |           |

### PLOT PLANS

| <u>SOURCE</u>  | PAGE           |             |
|--|----------------|-------------|
| 1. Hog Fuel Boiler   | <u>1 – 7</u>   |             |
| 2. Debarker  | <u>1 – 7</u>   |             |
| 3. Bark Hog  | <u>1 – 7</u>   |             |
| 4. Sawmill Processes                                       | 1-7            |             |
| 5. Drying Kilns  | $\frac{1-7}{}$ |             |
| 6. Planer Processes  | <u>1 7</u>     |             |
| 7. Hogged Bark Handling                                    | <u>1 – 7</u>   |             |
| 8. Sawdust Hangling  | <u>1-7</u>     |             |
| 9. Sawmill Chip Handling                                   | <u>1 - 7</u>   |             |
| 10. Planer Shavings and Chip Handling                      | <u>1 – 7</u>   |             |
| 11. Unpaved Road Dust Sources                              | <u>NA</u>      |             |
| 12. Paved Road Dust Sources                                | <u>NA</u>      |             |
|  |                |             |
|  | <u>YES</u>     | <u>NO</u>   |
| Are included?  |                |             |
| Shows location coordinates?                                |                |             |
| Shows plant boundaries?                                    |                |             |
| Shows neighboring ownership and facilities?                |                |             |
| ▶ Shows topography?  |                |             |
| Scale shown or distances adequately labeled?               |                |             |
| Shows all buildings, equipment, storage and roads?         |                |             |
| Is adequate for both existing and future or includes both? |                | <del></del> |

# EMISSION ESTIMATE REFERENCES AND DOCUMENTATION

| SOURCE   | <u>PAGE</u>   |              |
|--|---------------|--------------|
| 1. Hog Fuel Boiler   | <u>2 – 3</u>  |              |
| 2. Debarker  | <u>3 – 5</u>  |              |
| 3. Bark Hog  | <u>3 – 5</u>  |              |
| 4. Sawmill Processes   | <u>3 – 8</u>  |              |
| 5. Drying Kilns  | <u>3 – 11</u> |              |
| 6. Planer Processes  | <u>7 – 10</u> |              |
| 7. Hogged Bark Handling  | <u>3 – 5</u>  |              |
| 8. Sawdust Handling  | <u>7 – 7</u>  |              |
| 9. Sawmill Chip Handling   | <u>7 – 7</u>  |              |
| 10. Planer Shavings and Chip Handling  | <u>7 – 10</u> |              |
| 11. Unpaved Road Dust Sources  | <u>8 – 3</u>  |              |
| 12. Paved Road Dust Sources  | <u>8 – 6</u>  |              |
|  |               |              |
|  | YES           | <u>NO</u>    |
| ▶ All fugitive and point sources listed?   |               |              |
| ▶ All pollutants addressed?  |               | <del> </del> |
| Process documentation and specs included?  | -             |              |
| Control equipment documentation and specs included?                                    | <u></u>       |              |
| ▶ Emission factors documented and referenced?  |               |              |
| Calculations and assumptions shown?  |               | <u></u>      |
| Source tests referenced (test includes processing and control device test conditions)? | ·             |              |

### **COMPLIANCE CERTIFICATION PLAN**

| SOURCE  | <u>PAGE</u>   |           |
|---|---------------|-----------|
| 1. Hog Fuel Boiler  | <u>9 – 13</u> |           |
| 2. Debarker   | <u>9 – 13</u> |           |
| 3. Bark Hog   | <u>9 – 13</u> |           |
| 4. Sawmill Processes  | 9 – 13        |           |
| 5. Drying Kilns   | <u>9 – 13</u> |           |
| 6. Planer Processes   | <u>9 – 13</u> | ٠         |
| 7. Hogged Bark Handling   | <u>9 – 13</u> |           |
| 8. Sawdust Handling   | <u>9 – 13</u> |           |
| 9. Sawmill Chip Handling  | <u>9 – 13</u> |           |
| 10. Planer Shavings and Chip Handling   | <u>9 – 13</u> |           |
| 11. Unpaved Road Dust Sources   | <u>9 – 13</u> |           |
| 12. Paved Road Dust Sources   | <u>9 – 13</u> |           |
|   |               |           |
|   | <u>YES</u>    | <u>NO</u> |
| Monitoring, record keeping, and reporting discussed?  |               |           |
| Stack testing methods thoroughly documented?  |               |           |
| Discussion and documentation of process control<br>mechanisms used to meet emission limits? |               |           |
| Quality assurance/quality control discussed?  |               |           |
| Manitaring equipment specs and documentation included?                                      |               |           |

### SECTION 1: GENERAL INFORMATION

| COMPANY & DIVISION NAME                                | Chilco Lake Lumber Company, LLC - dba Riley Creek - Chilco Sawmill  |
|--|---|
| STREET ADDRESS OR P.O. BOX                             | 4447 E. Chilco Road   |
| CITY   | Athol   |
| STATE ID   | ZIP 83801   |
| PERSON TO CONTACT                                      | Marc A. Brinkmeyer  |
| TITLE  | President   |
| PHONE NUMBER   | (208) - 263-7574  |
| EXACT PLANT LOCATION                                   | SE 1/4, Section 7, Township 52 North, Range 3 West  |
| GENERAL NATURE OF BUSINESS                             | Sawmill   |
| NUMBER OF FULL-TIME EMPLOYEES                          | 140   |
| PROPERTY AREA (ACRES)                                  | 280  REASON FOR APPLICATION  (1) Permit to Construct a new facility;  (2) Permit to Modify an existing source;  (3) Permit to Construct a new source at an existing facility;  (4) Change of Owner or Location;  (5) Tier I Permit to Operate;  (6) Tier II Permit to Operate |
| DISTANCE TO NEAREST STATE BORDER (MILES)               | 20  |
| PRIMARY SIC  | 2421 SECONDARY SIC  |
| PLANT LOCATION COUNTY                                  | Kootenai ELEVATION (FT) 2306  |
| UTM ZONE   | 11  |
| UTM (X) COORDINATE (KM)                                | 519.0 E UTM (Y) COORDINATE (KM) 5301.0 N  |
| Riley Creek Lumber Company Riley Creek - Moyie Springs | LOCATION OF OTHER FACILITIES re under your control, or under common control, and have emissions to the air. If none, so state  Laclede, Idaho  Moyie Springs, Idaho  Bonners Ferry, Idaho   |
| Riley Creek - Bonners Ferry                            | Boillers Ferry, Idano   |
|  |   |
|  |   |
| OWNER OR RESPONSIBLE OFFIC                             |   |
| TITLE OF RESPONSIBLE OFFICIA                           | President   |
| document are true, accurate, and co                    |   |
| SIGNATURE OF OWNER OF RES                              | PONSIBLE OFFICIAL 29-Sep-05   |
| V  | 23-3ep-03   |

Riley Creek -- Chilco Sawmill

9/27/2005

Page 1-1

### **Source Description**

#### **Description of Site:**

Riley Creek Lumber Company (Riley Creek) owns and operates a sawmill facility near Chilco, Idaho. The Riley Creek - Chilco Sawmill facility is located west of Highway 95, near Althol, Idaho in Kootenai County. Universal Transverse Mercator (UTM) coordinates for this site are Zone 11, Easting 219.0 kilometers, and Northing 5,301.0 kilometers. The Chilco sawmill site is located in the SE1/4 of Section 7, Township 52 North, Range 3 West. The site elevation is approximately 2,300 feet above sea level. Figure 1 is a site location map. Figure 2 is a site plan of the Chilco Sawmill.

### Summary of the Process:

The primary processes at the facility are the sawmill, steam plant, dry kilns and the planer mill. Logs are debarked, then cut to dimension in the sawmill. Green lumber from the sawmill is dried in the dry kilns and planed in the planer mill. Finished lumber is packaged and shipped by truck and rail. Bark from the debarker is hogged and transferred to the boiler for use as fuel. A plant flow diagram is shown on Figure 1.

The sawmill includes a debarker, bark hog, and hogged bark transfer to the boiler. The debarker strips bark from the logs and the bark hog shreds it into hog fuel. Emissions from the debarker are controlled using water spray when the temperatures are above freezing. The spray provides highly efficient particulate control when in use. The hog is enclosed and emissions are minimal. A pneumatic conveyor transports hogged bark to the hog fuel cyclone/filter. The cyclone transfers hog fuel either to the truck bin for sales or the fuel house to be transferred to the boiler.

The sawing operations are located in the sawmill building. Sawmill operations produce wood scraps and sawdust. A chipper cuts the wood scraps into marketable chips and screens out the fine material. Fine material that falls through the chipper screen is added to the sawdust. A pneumatic conveyor transfers the sawdust from the building to a target box on the outdoor sawdust truck bin. Pneumatic transfer is also used to move the sawmill chips to the chip bin target box.

Riley Creek's Chilco facility includes four lumber drying kilns. The kilns are heated via indirect steam heat supplied by the hog fuel boiler. Initial moisture content of the lumber is in the range of 40-60%. The final moisture varies depending on species and product, but is generally around 10%. Moisture that is driven out of the lumber is released from the dry kilns through multiple roof vents. Each of the four kilns two rows of eleven vents. The vents are opened and closed as needed to control the temperature and moisture within the kiln. Batch drying cycles in the dry kilns can last for 30 to 60 hours.

The planers and associated equipment are located in the planer building. Air quality within the planer building is controlled with negative air, so there are minimal emissions from the planer facility. Planer shavings are transported pneumatically from the planer building to a cyclone on the shavings bin. The cyclone separates the shavings from the air stream and drops them into the bin. Cyclone exhaust is further cleaned by the planer shavings baghouse, which exhausts back into the planer building. The planer facility also includes a chipper, located inside the building. Planer chips are transferred pneumatically to the planer chip bin. Exhaust from the chip conveyor is vented through the baghouse.

Riley Creek's hog fuel boiler is a Kipper and Sons spreader stoker boiler rated for 75,000 pounds of steam per hour. The hog-fuel boiler has the potential to emit particulate matter (PM and PM<sub>10</sub>), nitrogen oxides, carbon monoxide, sulfur dioxide, volatile organic compounds and trace hazardous air pollutants. Generation of nitrogen oxides and carbon monoxide emissions is controlled through boiler design. Sulfur dioxide and VOC emissions are low from hog fuel boilers, based on the composition of the fuel.

Particulate emissions from the boiler are routed to a high efficiency multiclone. Ash and partially combusted wood fiber is separated by the multiclone and is reintroduced into the boiler firebox. After the multiclone, the uncollected fine dust and smoke particles are cleaned in an electrified filter bed (EFB) fine dust collector. In this system, the fine dust particles are given an electrostatic charge in a corona ionizer and are then deposited onto the surface of electrically polarized pea gravel. The spent pea gravel is removed from the filtration region of the EFB and is cleaned externally in a pneumatic conveyor. Dust removed from the pea gravel is filtered in a small bag filter (EFB media baghouse).

Road traffic at the facility includes trucks hauling logs to the site, trucks hauling lumber and residuals from the site, and employee vehicle traffic. Road dust emissions are controlled through paving haul roads. As shown on the site plan in Figure 2, most of the driving surfaces at the facility are paved.

## **Insignificant Activities:**

Activities and emission units identified as insignificant under IDAPA.01.01.317.01(b) are listed in the Tier I Operating Permit to qualify for a permit shield.

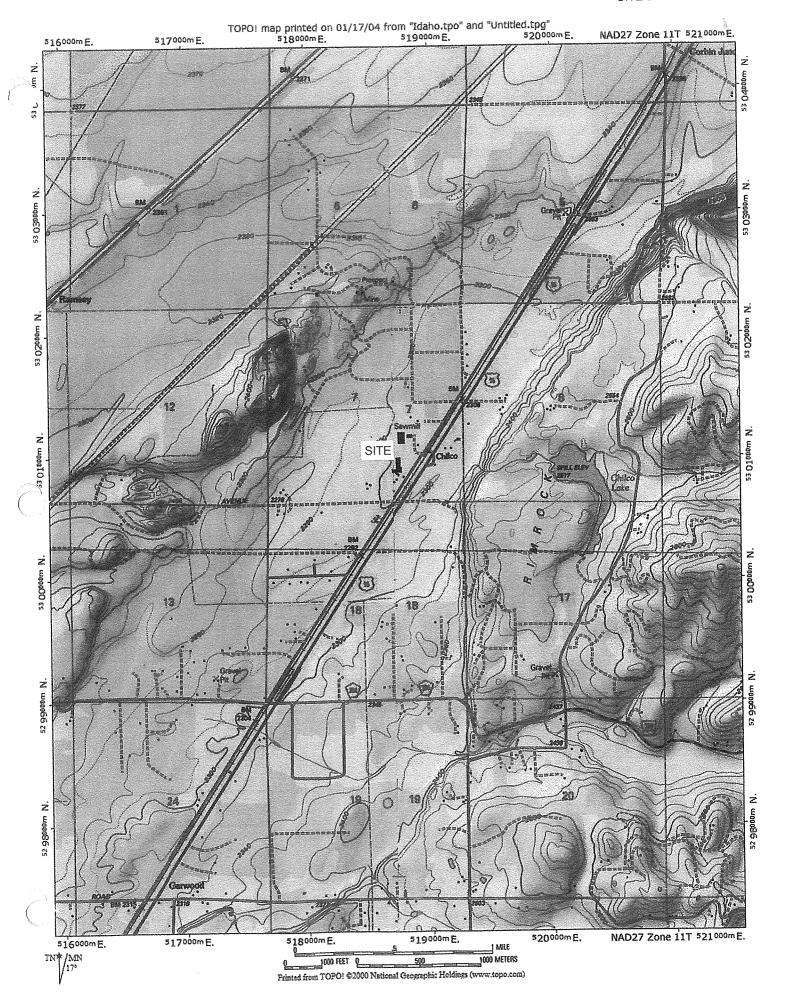
| Description                                      | Insignificant Activities IDAPA Citation Section 317.01(b)(I) |
|--|--|
| Sawmill, Indoor                                  | 30   |
| Sawmill Screen (Classifier), Indoor              | 30   |
| Sawmill Chipper, Indoor                          | 30   |
| Sawdust Bin Truck Loadout                        | 30   |
| Sawmill Chip Bin Truck Loadout                   | 30   |
| Hog Fuel Transfer to Fuel House                  | 30   |
| Hog Fuel Truck Bin Loadout                       | 30   |
| Planer Chipper and Screen                        | 30   |
|  | 30   |
| Planer Chip Bin Truck Loadout                    | 30   |
| Planer Shavings Bin Truck Loadout                | 30 (See Page 8-7)  |
| Fire Water Pump Small Generators and Compressors | (6)  |

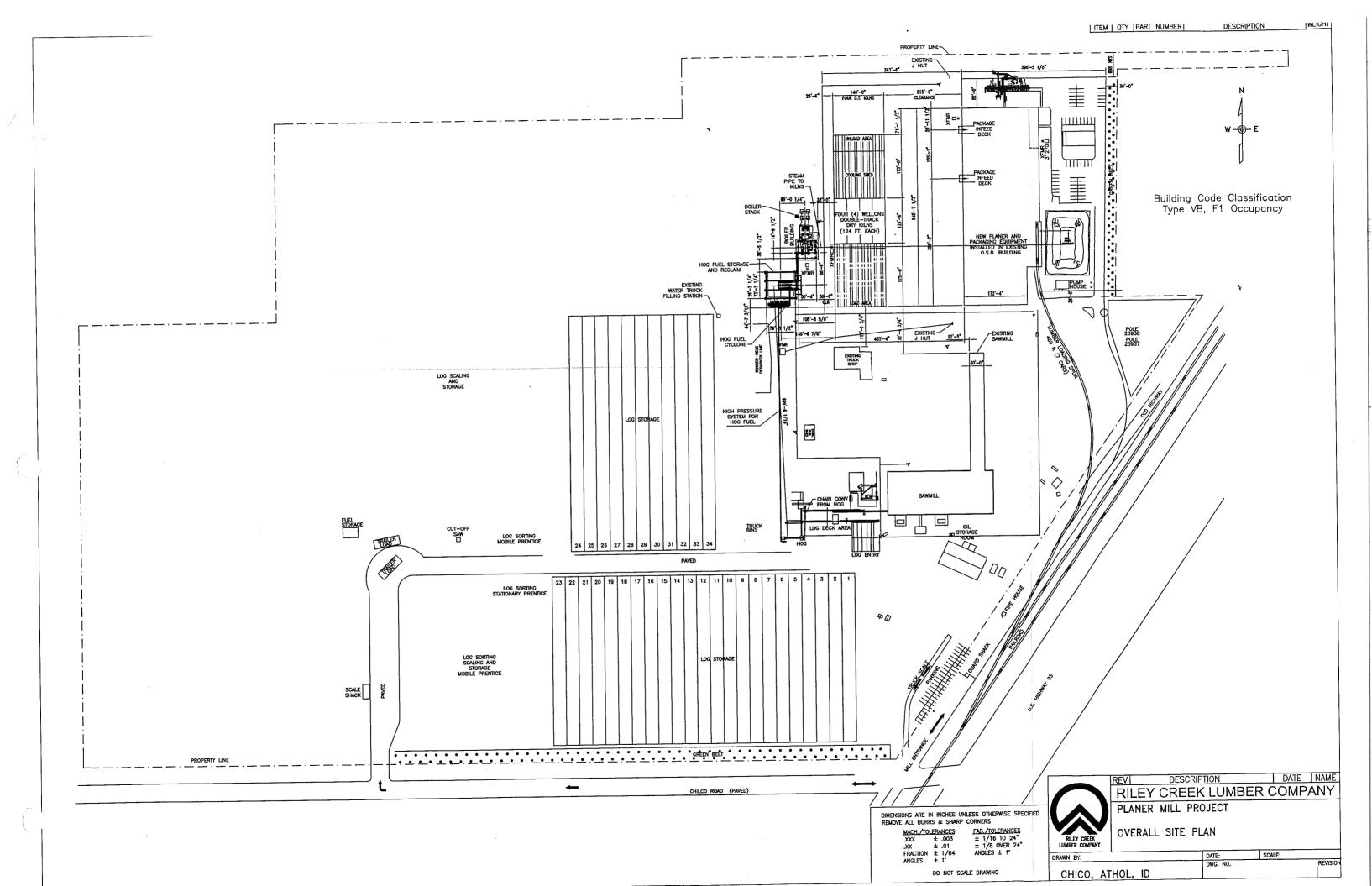
There are no monitoring, record keeping or reporting requirements for insignificant emission units or activities beyond those required in Part A (Facility-Wide Conditions) of this permit. [IDAPA 16.01.01.322.06]

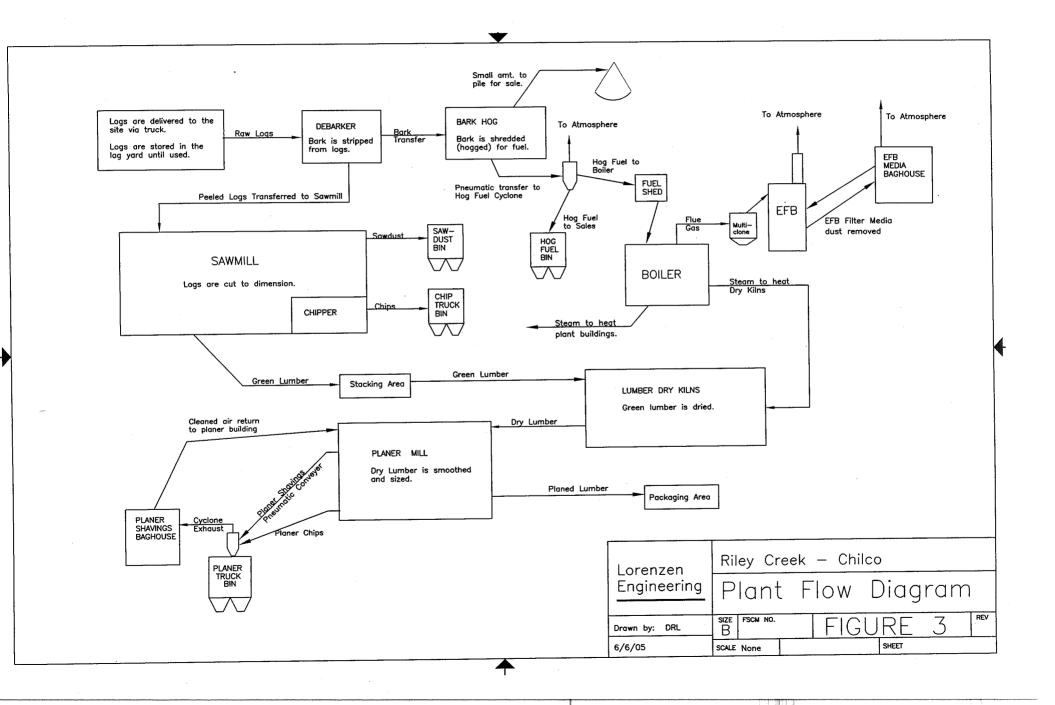
## **Process and Emitting Units:**

The following table lists the major processes at the facility with associated activities and process rates. The processes are shown in the plant flow diagram in Figure 2.

| Source  | Annual Potential Process<br>Rate  | Permit<br>Section |
|---|---|-------------------|
| Steam Plant<br>Boiler #2 - Kipper and Sons Hog Fuel Boiler  | 75,000 lbs steam/hr   | 2 - 1             |
| Logs and Bark<br>Debarking<br>Bark Hog  | 1,170,000 tons logs/year<br>234,000 tons bark/year                            | 3 - 1<br>3 - 2    |
| Sawmill Process<br>Sawmill, Indoor<br>Sawmill Screen, Indoor<br>Sawmill Chipper, Indoor                               | 325 mmbdft/year<br>106,144 tons sawdust/year<br>250,772 tons chips/year       | 3 - 4             |
| Lumber Drying   | 325 mmbdft/year   | 3 - 4             |
| Dry Kilns Planer Process, Indoor  |   | 3 - 5             |
| Hogged Bark Handling Hog Fuel Cyclone/Filter Hog Fuel Transfer Hog Fuel Bin Truck Loadout                             | 234,000 tons bark/year<br>234,000 tons bark/year<br>234,000 tons bark/year    | 7 - 1             |
| Sawmill Sawdust Handling Sawdust Convey Sawdust Bin Truck Loadout   | 106,144 tons sawdust/year<br>250,772 tons sawdust/year                        | 7 - 2             |
| Sawmill Chip Handling<br>Sawmill Chip Bin Target Box<br>Sawmill Chip Bin Truck Loadout                                | 250,772 tons chips/year<br>250,772 tons chips/year                            | 7 - 3             |
| Planer Chips and Shavings Handling Planer Chipper and Screen Shavings Bin Truck Loadout Planer Chip Bin Truck Loadout | 48,750 tons chips/year<br>97,500 tons shavings/year<br>48,750 tons chips/year | 7 - 4             |
| Fugitive Paved Road Dust  | See Spreadsheet   | 8 - 1             |
| Fugitive Unpaved Road Dust  | See Spreadsheet   | 8 - 2             |







### SECTION 2 - 1: FUEL BURNING EQUIPMENT

| DEQ USE ONLY                                |                    |                    |             |  |            |                               |
|---|--------------------|--------------------|-------------|--|------------|-------------------------------|
| DEQ PLANT ID CODE                           | DEQ P              | ROCESS CODE        |             | DEQ STAC   | (ID CODE   |                               |
| DEQ BUILDING ID CODE                        | PRIMA              | RY SCC             |             | SECONDAR   | Y SCC      |                               |
| DEQ SEGMENT CODE                            |                    |                    |             |  |            |                               |
|   |                    |                    |             |  |            |                               |
| PART A: GENERAL INFORMATIO                  | N BOILERS ARE NO   | OT AFFECTED BY THI | S PERMIT AP | PLICATION  |            |                               |
| PROCESS CODE OR DESCRIPTION                 | Hog F              | uel Boiler         |             |  |            |                               |
| STACK DESCRIPTION                           | EFB S              | Stack              |             |  |            |                               |
| BUILDING DESCRIPTION                        | Boiler             | Building           |             |  |            |                               |
| MANUFACTURER                                | Kipper and Sons    | MODEL              | 1018        | DATE INST  | ALLED      | Sep. 1, 2004                  |
|   |                    |                    |             | DATE LAS   | T MODIFIED | 1977 (Built)<br>Not modified. |
| RATED CAPACITY (CHO                         | OOSE APPROPRIATE I | UNITS)             |             |  |            | r                             |
| MILLION BTU/HR 125                          |                    | 1000 LBS STEAM/HR  | 75          | KILOWATTS NA   | HORSEPOWER | NA NA                         |
| BURNER TYPE 01                              | PERCENT            | USED FOR PROCESS   | 90          |  |            |                               |
| (SEE NOTE BELOW)                            | PERCENT US         | SED FOR SPACE HEAT | 10          |  |            |                               |
| FUEL DATA                                   |                    |                    |             |  |            |                               |
| PARAMETER                                   | PRIMARY<br>FUEL    | UNITS              |             | SECONDARY<br>FUEL  | UNITS      |                               |
| FUEL CODE (SEE NOTE BELOW)                  | 07                 |                    |             |  | •          |                               |
| PERCENT SULFUR                              | 0.01               |                    |             |  |            |                               |
| PERCENT ASH                                 | 1.13               |                    |             |  |            |                               |
| PERCENT NITROGEN                            | 0.23               |                    |             |  |            |                               |
| PERCENT CARBON                              | 34.49              |                    |             |  |            |                               |
| PERCENT HYDROGEN                            | 3.6                |                    |             |  |            |                               |
| PERCENT MOISTURE                            | 39.03              |                    |             |  |            |                               |
| HEAT CONTENT<br>(BTU/UNIT)                  | 5,457              | Btu/lb             |             |  |            |                               |
| MAXIMUM HOURLY COMBUSTION RATE (UNITS/HR)   | 11.5               | tons/hr            |             |  |            |                               |
| NORMAL ANNUAL<br>COMBUSTION RATE (UNITS/YR) | 88,400             | tons/year          |             |  |            |                               |
| 07) UNDER                                   |                    |                    |             | ID; 04) CYCLONE FURNAC<br>  COAL);<br>  Y FIRED; 10) AXIALLY FIR |            |                               |

FUEL CODES - 01) NATURAL GAS; 02) #1 OR #2 FUEL OIL; 03) #4 FUEL OIL; 04) #5 OR #6 FUEL OIL; 05) USED OIL 06) WOOD CHIPS; 07) WOOD BARK; 08) WOOD SHAVINGS; 09) SANDER DUST; 10) SUBBITUMINOUS COAL; 11) BITUMINOUS COAL; 12) ANTHRACITE COAL; 13) LIGNITE COAL 14) PROPANE; 15) OTHER (SPECIFY)

#### SECTION 2, PART B

| ODERATING DAT   | ۸   |  |   |   |
|---|---|--|---|---|
| OPERATING DATA<br>PERCENT FUEL CONSUMPTION PE   |   | NG SCHEDULE  |   |   |
| DEC-FEB 25  | HOURS/E   | DAY 2  | 24  |   |
| DEC-FEB 25 MAR-MAY 25   | DAYMEE  |  | 7   |   |
| JUN-AUG 25  | WEEKS/  |  | 52  |   |
| SEP-NOV 25  | =   | <del></del>  |   |   |
| <u> </u>  | TOOL FOLUDIMENT   |  |   |   |
| PARAMETER PARAMETER   | TROL EQUIPMENT<br>PRIMARY   | SECONDARY  |   | SECONDARY   |
| TYPE  | Multiclone  | Electrified Fliter Bed (E  | FB) w/BH  | EFB Media Baghouse  |
| TYPE CODE (FROM APP. A)   | 077   | 079  |   | 017   |
| MANUFACTURER  | Not Available   | EFB Particulate Syst   | tems  | EFB Particulate Systems   |
| MODEL NUMBER  | Not Available   | EFB FDC 75   |   | Not Available   |
| PRESSURE DROP (IN. OF WATER)  | N/A   | N/A  |   | N/A   |
| WET SCRUBBER FLOW (GPM)   | N/A   | N/A  |   | N/A   |
| BAGHOUSE AIR/CLOTH RATION (FF   | M) N/A  | N/A  |   |   |
| VENTILATION AND BUILDING/AI   | REA DATA  | STACK DATA (EF   | ∃ Stack)  | STACK DATA (EFB Media Baghouse)   |
| ENCLOSED (Y/N)?   |   | ELEVATION (FT)   | 2306  | GROUND ELEVATION (FT) 2306  |
| HOOD TYPE (FROM APP. B)   | N/A UTM X CC  | OORDINATE (KM)   | 518.6   | UTM X COORDINATE (KM) 518.6   |
| MINIMUM FLOW (ACFM)   | N/A UTM Y CO  | OORDINATE (KM)   | 5,301.1   | UTM Y COORDINATE (KM) 5,301.1   |
| PERCENT CAPTURE EFFICIENCY  | N/A STACK TY  | PE (SEE NOTE BELOW)  | 02  | STACK TYPE (SEE NOTE BELOW) 04  |
| BUILDING HEIGHT (FT)  | 30 STACK E  | XIT HEIGHT (FT)  | 85  | STACK EXIT HEIGHT (FT) 35   |
| BUILDING/AREA LENGTH (FT)   | 138 STACK E   | XIT DIAMETER (FT)  | 4.33  | STACK EXIT DIAMETER (FT) 3  |
| BUILDING/AREA WIDTH (FT)  | 69 STACK G  | AS FLOWRATE (ACFM)   | 42,000  | STACK GAS FLOWRATE (ACFM) 5,000   |
|   | CTACK TO  | EMPERATURE (DEG. F)  | 303   | STACK TEMPERATURE (DEG. F) 68   |
|   | STACK II  | • • •  |   |   |
| AIR POLLUTANT   |   |  | STACK)  |   |
|   | EMISSIONS (HOG FUEL BOILER  | EMITTED FROM EFB   |   | ALLOWABLE EMISSIONS   |
| AIR POLLUTANT POLLUTANT CAS NUMBER  | EMISSIONS (HOG FUEL BOILER  EMISSION FACTOR   | EMITTED FROM EFB PERCENT CONTROL   | ESTIMATED OR<br>MEASURED  |   |
|   | EMISSIONS (HOG FUEL BOILER EMISSION   | EMITTED FROM EFB   | ESTIMATED OR<br>MEASURED<br>EMISSIONS   | ALLOWABLE EMISSIONS (LBS/HR) (TONS/YR) REFERENCE  |
|   | EMISSIONS (HOG FUEL BOILER  EMISSION FACTOR   | EMITTED FROM EFB PERCENT CONTROL   | ESTIMATED OR<br>MEASURED  |   |
| POLLUTANT CAS NUMBER  | EMISSIONS (HOG FUEL BOILER  EMISSION FACTOR (SEE BELOW)   | PERCENT CONTROL EFFICIENCY   | ESTIMATED OR<br>MEASURED<br>EMISSIONS<br>(LBS/HR)   | (LBS/HR) (TONS/YR) REFERENCE  |
| POLLUTANT CAS NUMBER  | EMISSIONS (HOG FUEL BOILER  EMISSION FACTOR (SEE BELOW)  0.08 gr/dscf   | PERCENT CONTROL EFFICIENCY 99+ 99+   | ESTIMATED OR<br>MEASURED<br>EMISSIONS<br>(LBS/HR)<br>18.05  | (LBS/HR)         (TONS/YR)         REFERENCE           18.05         79.1         Idaho Reg.  |
| POLLUTANT CAS NUMBER  PM PM <sub>10</sub>   | EMISSIONS (HOG FUEL BOILER  EMISSION FACTOR (SEE BELOW)  0.08 gr/dscf 6.93 lb/hr 0.025 lb/MMBtt   | PERCENT CONTROL EFFICIENCY 99+ 99+   | ESTIMATED OR<br>MEASURED<br>EMISSIONS<br>(LBS/HR)<br>18.05  | (LBS/HR)         (TONS/YR)         REFERENCE           18.05         79.1         Idaho Reg.           6.93         30.4         Permit Limit   |
| POLLUTANT CAS NUMBER  PM  PM <sub>10</sub> SO <sub>2</sub>  | EMISSIONS (HOG FUEL BOILER  EMISSION FACTOR (SEE BELOW)  0.08 gr/dscf 6.93 lb/hr 0.025 lb/MMBtt   | PERCENT CONTROL EFFICIENCY 99+ 99+ 0 0 b steam, 0% control   | ESTIMATED OR MEASURED EMISSIONS (LBS/HR) 18.05 6.93   | (LBS/HR)         (TONS/YR)         REFERENCE           18.05         79.1         Idaho Reg.           6.93         30.4         Permit Limit           3.13         13.7         AP-42           60.8         246.08         Permit Limit           27.5         120         AP-42   |
| PM PM <sub>10</sub> SO <sub>2</sub> CO  | EMISSIONS (HOG FUEL BOILER  EMISSION FACTOR (SEE BELOW)  0.08 gr/dscf 6.93 lb/hr  0.025 lb/MMBtt 0.81 lb/1000 l   | PERCENT CONTROL EFFICIENCY 99+ 99+ 1 0 b steam, 0% control   | ESTIMATED OR MEASURED EMISSIONS (LBS/HR) 18.05 6.93 3.13 60.8   | (LBS/HR)         (TONS/YR)         REFERENCE           18.05         79.1         Idaho Reg.           6.93         30.4         Permit Limit           3.13         13.7         AP-42           60.8         246.08         Permit Limit           27.5         120         AP-42           7.75         33.9         AP-42   |
| PM PM <sub>10</sub> SO <sub>2</sub> CO NOX  | EMISSIONS (HOG FUEL BOILER  EMISSION FACTOR (SEE BELOW)  0.08 gr/dscf 6.93 lb/hr  0.025 lb/MMBtt 0.81 lb/1000 l 0.22 lb/MMBtt   | PERCENT CONTROL EFFICIENCY  99+ 99+ 100 b steam, 0% control 1100   | ESTIMATED OR MEASURED EMISSIONS (LBS/HR) 18.05 6.93 3.13 60.8   | (LBS/HR)         (TONS/YR)         REFERENCE           18.05         79.1         Idaho Reg.           6.93         30.4         Permit Limit           3.13         13.7         AP-42           60.8         246.08         Permit Limit           27.5         120         AP-42   |
| PM PM <sub>10</sub> SO <sub>2</sub> CO NOX VOC  | EMISSIONS (HOG FUEL BOILER  EMISSION FACTOR (SEE BELOW)  0.08 gr/dscf 6.93 lb/hr 0.025 lb/MMBt 0.81 lb/1000 l 0.22 lb/MMBt 0.062 lb/MMBt 4.80E-05 lb/MMBt   | PERCENT CONTROL EFFICIENCY  99+ 99+ 100 b steam, 0% control 1100   | ESTIMATED OR MEASURED EMISSIONS (LBS/HR) 18.05 6.93 3.13 60.8 27.5  | (LBS/HR)         (TONS/YR)         REFERENCE           18.05         79.1         Idaho Reg.           6.93         30.4         Permit Limit           3.13         13.7         AP-42           60.8         246.08         Permit Limit           27.5         120         AP-42           7.75         33.9         AP-42   |
| POLLUTANT CAS NUMBER  PM PM <sub>10</sub> SO <sub>2</sub> CO NOX VOC LEAD See following spreadsheets for HA               | EMISSIONS (HOG FUEL BOILER  EMISSION FACTOR (SEE BELOW)  0.08 gr/dscf 6.93 lb/hr 0.025 lb/MMBtt 0.81 lb/1000 l 0.22 lb/MMBtt 4.80E-05 lb/MMBtt  | PERCENT CONTROL EFFICIENCY  99+ 99+ 0 b steam, 0% control 0 0 0 0  | ESTIMATED OR MEASURED EMISSIONS (LBS/HR) 18.05 6.93 3.13 60.8 27.5  | (LBS/HR)         (TONS/YR)         REFERENCE           18.05         79.1         Idaho Reg.           6.93         30.4         Permit Limit           3.13         13.7         AP-42           60.8         246.08         Permit Limit           27.5         120         AP-42           7.75         33.9         AP-42   |
| POLLUTANT CAS NUMBER  PM PM <sub>10</sub> SO <sub>2</sub> CO NOX VOC LEAD See following spreadsheets for HA AIR POLLUTANT | EMISSIONS (HOG FUEL BOILER  EMISSION FACTOR (SEE BELOW)  0.08 gr/dscf 6.93 lb/hr 0.025 lb/MMBti 0.81 lb/1000 l 0.22 lb/MMBti 4.80E-05 lb/MMBti Ps emissions.  | PERCENT CONTROL EFFICIENCY  99+ 0 0 b steam, 0% control 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0                                  | ESTIMATED OR MEASURED EMISSIONS (LBS/HR) 18.05 6.93 3.13 60.8 27.5 7.75   | (LBS/HR)         (TONS/YR)         REFERENCE           18.05         79.1         Idaho Reg.           6.93         30.4         Permit Limit           3.13         13.7         AP-42           60.8         246.08         Permit Limit           27.5         120         AP-42           7.75         33.9         AP-42   |
| POLLUTANT CAS NUMBER  PM PM <sub>10</sub> SO <sub>2</sub> CO NOX VOC LEAD See following spreadsheets for HA               | EMISSIONS (HOG FUEL BOILER  EMISSION FACTOR (SEE BELOW)  0.08 gr/dscf 6.93 lb/hr 0.025 lb/MMBtt 0.81 lb/1000 l 0.22 lb/MMBtt 4.80E-05 lb/MMBtt  | PERCENT CONTROL EFFICIENCY  99+ 99+ 0 b steam, 0% control 0 0 0 DUSE)  PERCENT CONTROL   | ESTIMATED OR MEASURED EMISSIONS (LBS/HR) 18.05 6.93 3.13 60.8 27.5 7.75 0.0002  ESTIMATED OR MEASURED                             | (LBS/HR)         (TONS/YR)         REFERENCE           18.05         79.1         Idaho Reg.           6.93         30.4         Permit Limit           3.13         13.7         AP-42           60.8         246.08         Permit Limit           27.5         120         AP-42           7.75         33.9         AP-42           0.006         0.026         AP-42   |
| POLLUTANT CAS NUMBER  PM PM <sub>10</sub> SO <sub>2</sub> CO NOX VOC LEAD See following spreadsheets for HA AIR POLLUTANT | EMISSIONS (HOG FUEL BOILER  EMISSION FACTOR (SEE BELOW)  0.08 gr/dscf 6.93 lb/hr 0.025 lb/MMBt 0.81 lb/1000 l 0.22 lb/MMBt 1.80E-05 lb/MMBt 4.80E-05 lb/MMBt EMISSIONS (EFB MEDIA BAGHO   | PERCENT CONTROL EFFICIENCY 99+ 99+ 0 0 b steam, 0% control 0 0 0 DUSE) PERCENT   | ESTIMATED OR MEASURED EMISSIONS (LBS/HR) 18.05 6.93 3.13 60.8 27.5 7.75 0.0002  ESTIMATED OR MEASURED EMISSIONS                   | (LBS/HR)         (TONS/YR)         REFERENCE           18.05         79.1         Idaho Reg.           6.93         30.4         Permit Limit           3.13         13.7         AP-42           60.8         246.08         Permit Limit           27.5         120         AP-42           7.75         33.9         AP-42           0.006         0.026         AP-42   |
| PM PM <sub>10</sub> SO <sub>2</sub> CO NOX VOC LEAD See following spreadsheets for HA AIR POLLUTANT POLLUTANT CAS NUMBER  | EMISSIONS (HOG FUEL BOILER  EMISSION FACTOR (SEE BELOW)  0.08 gr/dscf 6.93 lb/hr 0.025 lb/MMBti 0.81 lb/1000 l 0.22 lb/MMBti 4.80E-05 lb/MMBti 4.80E-05 lb/MMBti EMISSIONS (EFB MEDIA BAGHO FACTOR  | PERCENT CONTROL EFFICIENCY  99+ 99+ 0 b steam, 0% control 0 0 0 DUSE)  PERCENT CONTROL   | ESTIMATED OR MEASURED EMISSIONS (LBS/HR) 18.05 6.93 3.13 60.8 27.5 7.75 0.0002  ESTIMATED OR MEASURED                             | (LBS/HR)         (TONS/YR)         REFERENCE           18.05         79.1         Idaho Reg.           6.93         30.4         Permit Limit           3.13         13.7         AP-42           60.8         246.08         Permit Limit           27.5         120         AP-42           7.75         33.9         AP-42           0.006         0.026         AP-42   ALLOWABLE EMISSIONS  (LBS/HR)  (TONS/YR)  REFERENCE  0.23  1.0  Test Res.   |
| POLLUTANT CAS NUMBER  PM PM <sub>10</sub> SO <sub>2</sub> CO NOX VOC LEAD See following spreadsheets for HA AIR POLLUTANT | EMISSIONS (HOG FUEL BOILER  EMISSION FACTOR (SEE BELOW)  0.08 gr/dscf 6.93 lb/hr 0.025 lb/MMBtc 0.81 lb/1000 l 0.22 lb/MMBtc 0.062 lb/MMBtc 4.80E-05 lb/MMBtc Ps emissions.  EMISSIONS (EFB MEDIA BAGHC EMISSION FACTOR (SEE BELOW)             | PERCENT CONTROL EFFICIENCY  99+ 0 0 b steam, 0% control 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0                                  | ESTIMATED OR MEASURED EMISSIONS (LBS/HR) 18.05 6.93 3.13 60.8 27.5 7.75 0.0002 ESTIMATED OR MEASURED EMISSIONS (LBS/HR)           | (LBS/HR)         (TONS/YR)         REFERENCE           18.05         79.1         Idaho Reg.           6.93         30.4         Permit Limit           3.13         13.7         AP-42           60.8         246.08         Permit Limit           27.5         120         AP-42           7.75         33.9         AP-42           0.006         0.026         AP-42           ALLOWABLE EMISSIONS           (LBS/HR)         (TONS/YR)         REFERENCE           0.23         1.0         Test Res.           0.23         1.0         Permit Limit |
| PM PM <sub>10</sub> SO <sub>2</sub> CO NOX VOC LEAD See following spreadsheets for HA AIR POLLUTANT POLLUTANT CAS NUMBER  | EMISSIONS (HOG FUEL BOILER  EMISSION FACTOR (SEE BELOW)  0.08 gr/dscf 6.93 lb/hr 0.025 lb/MMBtt 0.81 lb/1000 l 0.22 lb/MMBtt 4.80E-05 lb/MMBtt 4.80E-05 lb/MMBtt EMISSIONS (EFB MEDIA BAGHO FACTOR (SEE BELOW)  0.0054 gr/dscf                  | PERCENT CONTROL EFFICIENCY  99+ 0 b steam, 0% control 0 0 DUSE)  PERCENT CONTROL EFFICIENCY                                    | ESTIMATED OR MEASURED EMISSIONS (LBS/HR) 18.05 6.93 3.13 60.8 27.5 7.75 0.0002 ESTIMATED OR MEASURED EMISSIONS (LBS/HR) 0.23      | (LBS/HR)         (TONS/YR)         REFERENCE           18.05         79.1         Idaho Reg.           6.93         30.4         Permit Limit           3.13         13.7         AP-42           60.8         246.08         Permit Limit           27.5         120         AP-42           7.75         33.9         AP-42           0.006         0.026         AP-42   ALLOWABLE EMISSIONS  (LBS/HR) (TONS/YR) REFERENCE   |
| PM PM10 SO2 CO NOX VOC LEAD See following spreadsheets for HA AIR POLLUTANT POLLUTANT CAS NUMBER                          | EMISSIONS (HOG FUEL BOILER  EMISSION FACTOR (SEE BELOW)   0.08 gr/dscf 6.93 lb/hr 0.025 lb/MMBtt 0.062 lb/MMBtt 0.062 lb/MMBtt 4.80E-05 lb/MMBtt 4.80E-05 lb/MMBtt EMISSIONS (EFB MEDIA BAGHO (SEE BELOW)  0.0054 gr/dscf 0.0054 gr/dscf        | PERCENT CONTROL EFFICIENCY  99+ 99+ 0 b steam, 0% control 0 0 0 DUSE)  PERCENT CONTROL EFFICIENCY                              | ESTIMATED OR MEASURED EMISSIONS (LBS/HR) 18.05 6.93 3.13 60.8 27.5 7.75 0.0002  | (LBS/HR) (TONS/YR) REFERENCE  18.05   |
| PM PM10 SO2 CO NOX VOC LEAD See following spreadsheets for HA AIR POLLUTANT POLLUTANT CAS NUMBER  PM PM10 SO2             | EMISSIONS (HOG FUEL BOILER  EMISSION FACTOR (SEE BELOW)   0.08 gr/dscf 6.93 lb/hr 0.025 lb/MMBtt 0.81 lb/1000 l 0.22 lb/MMBtt 4.80E-05 lb/MMBtt 4.80E-05 lb/MMBtt EMISSIONS (EFB MEDIA BAGHO EMISSION FACTOR (SEE BELOW)  0.0054 gr/dscf 0      | PERCENT CONTROL EFFICIENCY  99+ 99+ 0 b steam, 0% control 0 0 DUSE)  PERCENT CONTROL EFFICIENCY                                | ESTIMATED OR MEASURED EMISSIONS (LBS/HR) 18.05 6.93 3.13 60.8 27.5 7.75 0.0002 ESTIMATED OR MEASURED EMISSIONS (LBS/HR) 0.23 0.23 | (LBS/HR)         (TONS/YR)         REFERENCE           18.05         79.1         Idaho Reg.           6.93         30.4         Permit Limit           3.13         13.7         AP-42           60.8         246.08         Permit Limit           27.5         120         AP-42           7.75         33.9         AP-42           0.006         0.026         AP-42    ALLOWABLE EMISSIONS  (LBS/HR)  (TONS/YR)  REFERENCE  0.23  1.0  Test Res.  0.23  1.0  Permit Limit   |
| PM PM10 SO2 CO NOX VOC LEAD See following spreadsheets for HA AIR POLLUTANT POLLUTANT CAS NUMBER  PM PM10 SO2 CO          | EMISSIONS (HOG FUEL BOILER  EMISSION FACTOR (SEE BELOW)  0.08 gr/dscf 6.93 lb/hr 0.025 lb/MMBti 0.81 lb/1000 l 0.22 lb/MMBti 4.80E-05 lb/MMBti 4.80E-05 lb/MMBti EMISSIONS (EFB MEDIA BAGHO SEE BELOW)  0.0054 gr/dscf 0.0054 gr/dscf 0         | PERCENT CONTROL EFFICIENCY  99+ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  | ESTIMATED OR MEASURED EMISSIONS (LBS/HR) 18.05 6.93 3.13 60.8 27.5 7.75 0.0002 ESTIMATED OR MEASURED EMISSIONS (LBS/HR) 0.23 0.23 | (LBS/HR) (TONS/YR) REFERENCE  18.05   |
| PM PM10 SO2 CO NOX VOC LEAD See following spreadsheets for HA AIR POLLUTANT POLLUTANT CAS NUMBER  PM PM10 SO2 CO NOX      | EMISSIONS (HOG FUEL BOILER  EMISSION FACTOR (SEE BELOW)  0.08 gr/dscf 6.93 lb/hr 0.025 lb/MMBt 0.81 lb/1000 l 0.22 lb/MMBt 4.80E-05 lb/MMBt EMISSIONS (EFB MEDIA BAGHO SEE BELOW)  0.0054 gr/dscf 0.0054 gr/dscf 0 0                            | PERCENT CONTROL EFFICIENCY  99+ 0 0 b steam, 0% control 0 0 DUSE)  PERCENT CONTROL EFFICIENCY  99+ 99+ 99+ 99+ 99+ 99+ 99+ 99+ | ESTIMATED OR MEASURED EMISSIONS (LBS/HR) 18.05 6.93 3.13 60.8 27.5 7.75 0.0002 ESTIMATED OR MEASURED EMISSIONS (LBS/HR) 0.23 0.23 | (LBS/HR) (TONS/YR) REFERENCE  18.05   |
| PM PM10 SO2 CO NOX VOC LEAD See following spreadsheets for HA AIR POLLUTANT POLLUTANT CAS NUMBER  PM PM10 SO2 CO NOX VOC  | EMISSIONS (HOG FUEL BOILER  EMISSION FACTOR (SEE BELOW)  0.08 gr/dscf 6.93 lb/hr 0.025 lb/MMBti 0.81 lb/1000 l 0.22 lb/MMBti 4.80E-05 lb/MMBti 4.80E-05 lb/MMBti EMISSIONS (EFB MEDIA BAGHO SEE BELOW)  0.0054 gr/dscf 0.0054 gr/dscf 0 0 0 0 0 | PERCENT CONTROL EFFICIENCY  99+ 0 0 b steam, 0% control 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0                                  | ESTIMATED OR MEASURED EMISSIONS (LBS/HR) 18.05 6.93 3.13 60.8 27.5 7.75 0.0002 ESTIMATED OR MEASURED EMISSIONS (LBS/HR) 0.23 0.23 | (LBS/HR) (TONS/YR) REFERENCE  18.05   |

STACK TYPE - 01) DOWNWARD; 02) VERTICAL (UNCOVERED); 03) VERTICAL (COVERED); 04) HORIZONTAL; 05) FUGITIVE EMISSION FACTOR IN LBS/UNITS. PLEASE USE SAME HOURLY UNITS GIVEN IN FUEL DATA SECTION.

NOTE:

#### KIPPER & SONS HOG FUEL BOILER

Controlled by EFB

Design Boiler Capacity

Permit Limit

75,000 lb steam/hr, peak hour

69,360 lb steam/hr, 24-hour average

16,707 dscfm @ 0% O<sub>2</sub> (2005 stack test)

8,760 Hours/Year 125.00 mmBtu/hr maximum

1.67 mmBtu/1000 lb steam

CRITERIA POLLUTANTS

TSP (controlled):

Emission Factor:

Emissions:

0.08 gr/dscf @ 8% Oxygen

79.1 tons/year 433.2 lbs/day

18.05 lbs/hr

Regulatory Limit

Maximum allowed under regulatory limit.

PM10 (controlled):

Emission Factor:

Emissions:

0.08 gr/dscf @ 8% Oxygen

30.4 tons/year

166.3 lbs/day 6.93 lbs/hr

Regulatory Limit Permit Limit

Permit Limit

Sulfur Dioxide:

Emission Factor:

Emissions:

0.025 lb/mmBtu

13.69 tons/year

75.00 lbs/day 3.13 lbs/hr

(AP-42 TABLE 1.6-2, Rev 9/03)

Nitrogen Oxides (NOx)

Emission Factor:

Emissions:

0.22 lb/mmBtu

120.5 tons/year

660.0 lbs/day

27.50 lbs/hr

(AP-42 TABLE 1.6-2, Rev 9/03)

Volatile Organic Compounds (VOC)

Emission Factor:

Emissions:

0.062 lb/mmBtu 33.9 tons/year

186.0 lbs/day

7.75 lbs/hr

Value from Sandpoint Permit

Carbon Monoxide (CO)

Emission Factor:

Emissions:

0.81 lb/1000 lb steam 246.08 tons/year

1,458 lbs/day 60.75 lbs/hr

Permit Limit Permit Limit

Lead (Pb)

Emission Factor: Emissions:

4.80E-05 lb/mmBtu

2.63E-02 tons/year

1.44E-01 lbs/day 6.00E-03 lbs/hr

(AP-42 TABLE 1.6-4, Rev 9/03)

EFB MEDIA BAGHOUSE - POINT SOURCE

5000 scf/min

Baghouse design flow.

TSP:

Emission Factor:

Emissions:

0.0054 gr/dscf 1.9 tpy

5.55 lbs/day

0.23 lb/hr

PM10:

Emission Factor:

Emissions:

0.0054 gr/dscf 1.9 tpy

> 5.55 lbs/day 0.23 lb/hr

Baghouse design emission rate.

Baghouse design emission rate.

**Proposed Permit Limit** 

**Proposed Permit Limit** 

KIPPER & SONS HOG FUEL BOILER
HAZARDOUS AIR POLLUTANTS (HAPS)
ONE TYPICAL HAPS CALCULATION IS SHOWN; A TABLE OF HAPS CALCULATIONS FOLLOWS

Formaldehyde Emission Factor: Emissions:

(AP-42 TABLE 1.6-3, Rev 9/03)

4.40E-03 lb/mmBtu 2.41 tons/year 13.20 lbs/day

0.55 lbs/hr

Operating Parameters: Potential Hours of Operation Max Heat Input Annual Boiler Heat Input

8,760 hours/yr 125.0 mmBtu / hr 1,095,000 mmBtu / yr

| nnual Boiler Heat Input  | 1,095,000 mmBtu/yr            |                      |          |  |  |  |
|--|-------------------------------|----------------------|----------|--|--|--|
| mission Factors:   | P                             | Potential Emissions: |          |  |  |  |
| P-42 Ch.1.6, Tables 1.6-3 and 1.6-4 (9/03)                     | Emission Factor<br>(lb/mmBtu) |                      |          |  |  |  |
| cetaldehyde  | 8.30E-04                      | 1.04E-01             | 4.54E-01 |  |  |  |
| cetophenone  | 3.20E-09                      | 4.00E-07             | 1.75E-06 |  |  |  |
| crolein  | 4.00E-03                      | 5,00E-01             | 2.19E+00 |  |  |  |
| enzene   | 4.20E-03                      | 5.25E-01             | 2.30E+00 |  |  |  |
| enzo(a)pyrene  | 2.60E-06                      | 3.25E-04             | 1.42E-03 |  |  |  |
| s(2-ethylhexyl)phthalate                                       | 4.70E-08                      | 5.88E-06             | 2.57E-05 |  |  |  |
| romomethane (methyl bromide)                                   | 1.50E-05                      | 1.88E-03             | 8.21E-03 |  |  |  |
| -Butanone (MEK)  | 5.40E-06                      | 6.75E-04             | 2.96E-03 |  |  |  |
| arbon tetrachloride  | 4.50E-05                      | 5.63E-03             | 2.46E-02 |  |  |  |
| hlorine  | 7.90E-04                      | 9.88E-02             | 4.33E-01 |  |  |  |
| hlorobenzene   | 3.30E-05                      | 4.13E-03             | 1.81E-02 |  |  |  |
| hloroform  | 2.80E-05                      | 3,50E-03             | 1.53E-02 |  |  |  |
| thioromethane (Methyl Chloride)                                | 2.30E-05                      | 2.88E-03             | 1.26E-02 |  |  |  |
| ,2-Dichloroethane  | 2.90E-05                      | 3.63E-03             | 1.59E-02 |  |  |  |
| ,z-Dicfilotoethane<br>Dichloromethane (Methylenechloride)      | 2.90E-04                      | 3.63E-02             | 1.59E-01 |  |  |  |
| ,2-Dichloropropane (Propolyene dichloride)                     | 3,30E-05                      | 4.13E-03             | 1.81E-02 |  |  |  |
| thylbenzene  | 3,10E-05                      | 3.88E-03             | 1.70E-02 |  |  |  |
| Formadehyde  | 4.40E-03                      | 5.50E-01             | 2.41E+00 |  |  |  |
| Hydrogen chloride  | 1.90E-02                      | 2.38E+00             | 1.04E+01 |  |  |  |
| Methanol   | N/A                           | 0.00E+00             | 0.00E+00 |  |  |  |
| Naphthalene  | 9.70E-05                      | 1.21E-02             | 5.31E-02 |  |  |  |
| 4-Nitrophenol  | 1.10E-07                      | 1.38E-05             | 6.02E-05 |  |  |  |
| Pentachlorophenol  | 5.10E-08                      | 6.38E-06             | 2.79E-05 |  |  |  |
| Phenol   | 5.10E-05                      | 6.38E-03             | 2.79E-02 |  |  |  |
| Polycyclic Organic Matter (POM)                                | 2,89E-06                      | 3.61E-04             | 1.58E-03 |  |  |  |
| Benzo(a)anthracene   | 6.50E-08                      |                      |          |  |  |  |
| Benzo(a)pyrene   | 2.60E-06                      |                      |          |  |  |  |
| Benzo(b)fluoranthene   | 1.00E-07                      |                      |          |  |  |  |
| Benzo(k)fluoranthene   | 3.60E-08                      |                      |          |  |  |  |
| Indeno(1,2,3,cd)pyrene   | 8.70E-08                      |                      |          |  |  |  |
| <u></u>  | 1.90E-03                      | 2.38E-01             | 1.04E+00 |  |  |  |
| Styrene<br>2,3,7,8-Tetrachlorodibenzo-p-dioxins                | 8.60E-12                      | 1.08E-09             | 4.71E-09 |  |  |  |
|  | 9.20E-04                      | 1.15E-01             | 5,04E-01 |  |  |  |
| Toluene<br>1,1,1-Trichloroethane (Methyl Chloroform)           | 3.10E-05                      | 3.88E-03             | 1.70E-02 |  |  |  |
| 1,1,1-1 nchioroethane (wethy) Chronolomy 2,4,6-Trichlorophenol | 2.20E-08                      | 2.75E-06             | 1.20E-05 |  |  |  |
|  | 1.80E-05                      | 2.25E-03             | 9.86E-03 |  |  |  |
| Vinyl Chloride   | 2.50E-05                      | 3.13E-03             | 1.37E-02 |  |  |  |
| o-Xylene<br>Antimony   | 7.90E-06                      | 9.88E-04             | 4.33E-03 |  |  |  |
| 1  | 2.20E-05                      | 2.75E-03             | 1.20E-02 |  |  |  |
| Arsenic  | 1.10E-06                      | 1.38E-04             | 6.02E-04 |  |  |  |
| Berylium   | 4.10E-06                      | 5.13E-04             | 2.24E-03 |  |  |  |
| Cadmium  | 2,10E-05                      | 2.63E-03             | 1.15E-02 |  |  |  |
| Chromium, total  | 3,50E-06                      | 4.38E-04             | 1.92E-03 |  |  |  |
| Chromium, hexavalent   | 6,50E-06                      | 8.13E-04             | 3.56E-03 |  |  |  |
| Cobalt   | 4.80E-05                      | 6.00E-03             | 2.63E-02 |  |  |  |
| Lead   | 1.60E-03                      | 2.00E-01             | 8.76E-01 |  |  |  |
| Manganese  | 3.50E-06                      | 4.38E-04             | 1.92E-03 |  |  |  |
| Mercury  | 3.30E-05                      | 4.13E-03             | 1.81E-02 |  |  |  |
| Nickel   | 2.80E-06                      | 3.50E-04             | 1.53E-03 |  |  |  |
| Selenium   | TOTAL HA                      |                      | 21.11    |  |  |  |

#### TOXIC AIR POLLUTANTS (TAPS) These compounds are not HAPS.

| Emission F   | actors:            | Poter                            | ntial Emiss                       | tial Emissions:                        |                         |  |  |  |
|--|--------------------|----------------------------------|-----------------------------------|--|-------------------------|--|--|--|
| AP-42<br>Ch.1.6,<br>Tables 1.6-3<br>and 1.6-4<br>(9/03)<br>emission<br>factors | TAP Class<br>(A/B) | Emission<br>Faclor<br>(lb/mmBtu) | Potential<br>Emissions<br>(lb/hr) | Total Annual<br>Emissions<br>(tons/yr) | Total Annual<br>(lb/yr) |  |  |  |
| Acetone  | В                  | 1.90E-04                         | 2.38E-02                          | 1.04E-01                               | 208.05                  |  |  |  |
| 2-Chlorophei   | В                  | 2.40E-08                         | 3.00E-06                          | 1.31E-05                               | 0.03                    |  |  |  |
| Crotonaldehy   | В                  | 9.90E-06                         | 1.24E-03                          | 5.42E-03                               | 10.84                   |  |  |  |
| Copper   | В                  | 4.90E-05                         | 6.13E-03                          | 2.68E-02                               | 53.66                   |  |  |  |
| Molybdenum   | В                  | 2.10E-06                         | 2.63E-04                          | 1.15E-03                               | 2,30                    |  |  |  |
| Phosphorus   | В                  | 2.70E-05                         | 3.38E-03                          | 1.48E-02                               | 29.57                   |  |  |  |
| Silver   | В                  | 1.70E-03                         | 2.13E-01                          | 9.31E-01                               | 1861.50                 |  |  |  |
| Tin  | В                  | 2.30E-05                         | 2.88E-03                          | 1.26E-02                               | 25.19                   |  |  |  |
| Vanadium   | В                  | 9.80E-07                         | 1.23E-04                          | 5.37E-04                               | 1.07                    |  |  |  |
| Yttrjum  | В                  | 3.00E-07                         | 3.75E-05                          | 1.64E-04                               | 0.33                    |  |  |  |
| Zinc   | В                  | 4.20E-04                         | 5.25E-02                          | 2.30E-01                               | 459.90                  |  |  |  |

# SECTION 3-1: PROCESS AND MANUFACTURING OPERATIONS

| DEQ USE ONLY  DEQ PLANT ID CODE  DEQ BUILDING ID CODE  DEQ SEGMENT CODE  | DEQ PROCESS CODE<br>PRIMARY SCC |                          | DEQ STACK ID COD<br>SECONDARY SCC     |                                 |  |
|--|---------------------------------|--------------------------|---------------------------------------|---------------------------------|--|
| PART A: GENERAL INFORMATION  PROCESS CODE OR DESCRIPTION  STACK DESCRIPTION  BUILDING DESCRIPTION  MANUFACTURER  | Debarking NONE NONE             | MODEL                    | DA                                    | DATE INSTALLED TE LAST MODIFIED | 1995<br>Not modified.                      |
| PROCESSING DATA  PROCESS STREAM  MATERIAL DESCRIPTION  INPUT  PRODUCT OUTPUT  BYPRODUCT OUTPUT  RECYCLE  NA  MATERIAL DESCRIPTION  Product output  Decled logs  NA | MAXIMUM HOURLY RATE             | ACTUAL<br>HOURLY<br>RATE | ACTUAL<br>ANNUAL<br>RATE<br>1,170,000 | tons/year tons/year             |  |
| POTENTIAL HAPS IN PROC   | HAP CAS NUMBER                  | FRACTION IN INF          | PUT FRACTION IN PRODU                 | JCTFRACTION IN WAST             | TE FRACTION IN RECYCLE IT STREAM BY WEIGHT |

| SECTION 3-1, PART B, DEBARKING  |   |   |   |                               |   |                     |
|---|---|---|---|-------------------------------|---|---------------------|
| OPERATING DATA PERCENT PRODUCTION PER QUARTER   | OPERATING   | SCHEDULE, TYPICAL   |   |                               |   |                     |
| DEC-FEB 25  MAR-MAY 25  JUN-AUG 25  | HOURS/DAY<br>DAY/WEEK<br>WEEKS/YEA                      | 7   |   |                               |   |                     |
| SEP-NOV 25 POLLUTION CONTROL EQUIP  | MENT  |   | SECONDA   | DV                            |   |                     |
| PARAMETER TYPE TYPE CODE (FROM APP. A)  | PRIMARY<br>NONE   |   | NONE  |                               |   |                     |
| MANUFACTURER  MODEL NUMBER  PRESSURE DROP (IN. OF WATER)  WET SCRUBBER FLOW (GPM)  BAGHOUSE AIR/CLOTH RATION (FPM)  |   |   |   | ]                             | <b>_</b>                                      |                     |
| VENTILATION AND BUILDING ENCLOSED (Y/N)? HOOD TYPE (FROM APP. B) MINIMUM FLOW (ACFM) PERCENT CAPTURE EFFICIENCY BUILDING HEIGHT (FT) BUILDING/AREA LENGTH (FT) BUILDING/AREA WIDTH (FT) | N/A                 | GROUND ELEVATION UTM X COORDINATE UTM Y COORDINATE STACK TYPE (SEE NO STACK EXIT HEIGHT STACK EXIT DIAMETE STACK EXIT GAS FLO STACK EXIT TEMPER | (FT)<br>(KM)<br>(KM)<br>OTE BELOW)<br>FROM GROUND LEVEL<br>ER (FT)<br>OWRATE (ACFM) | (FT)                          | 2,306<br>518.8<br>5,300.8<br>05<br>N/A<br>N/A |                     |
| POLLUTANT CAS NUMBER  PM PM10 SO2 CO NOX VOC LEAD   | EMISSION FACTOR (SEE BELOW)  0.02 lib/ton 0.011 lib/ton | PERCENT CONTROL EFFICIENCY  | ESTIMATED OR MEASURED EMISSIONS (LBS/HR) 2.67  1.47                                 | (LBS/HR)  2.67  1.47        . | (TONS/YR)  11.7  6.44                         | REFERENCE AIRS AIRS |

NOTE: STACK TYPE - 01) DOWNWARD; 02) VERTICAL (UNCOVERED); 03) VERTICAL (COVERED); 04) HORIZONTAL; 05) FUGITIVE EMISSION FACTOR IN LBS/UNITS. PLEASE USE SAME HOURLY UNITS GIVEN IN FUEL DATA SECTION.

# SECTION 3-2: PROCESS AND MANUFACTURING OPERATIONS

| DEQ USE ONLY   |                  |                   |                                   | DEQ STACK ID CODE                            |                    |  |
|--|------------------|-------------------|-----------------------------------|--|--------------------|--|
| DEQ PLANT ID CODE  |                  | DEQ PROCESS CODE  |                                   | SECONDARY SCC                                |                    |  |
| DEQ BUILDING ID CODE   |                  | PRIMARY SCC       |                                   | SECONDAIL 000                                |                    |  |
| DEQ SEGMENT CODE   |                  |                   |                                   |  |                    |  |
| The second secon |                  |                   |                                   |  |                    |  |
| PART A: GENERAL  | LINFORMATION     |                   |                                   |  |                    |  |
| PROCESS CODE OR DES  | CRIPTION         | Bark Hog          |                                   |  |                    |  |
| STACK DESCRIPTION  |                  | NONE              |                                   |  |                    |  |
| BUILDING DESCRIPTION   |                  | NONE              |                                   |  |                    | 1995                                     |
| MANUFACTURER   |                  |                   | MODEL                             |  | DATE INSTALLED     | Not modified.                            |
| Hu witer / v= v =  |                  |                   |                                   | DATI   | E LAST MODIFIED    | Not modified.                            |
| PROCES   | SING DATA        |                   |                                   |  |                    |  |
| PROCESS STREAM   | MATERIAL         | MAXIMUM           | ACTUAL<br>HOURLY                  | ACTUAL<br>ANNUAL                             | UNITS              |  |
| 11100200   | DESCRIPTION      | HOURLY<br>RATE    | RATE                              | RATE   |                    |  |
|  | lh aute          |                   |                                   | 234,000                                      | tons/year          |  |
| INPUT  | bark bark        |                   |                                   | 234,000                                      | tons/year          |  |
| PRODUCT OUTPUT   | hogged bark      |                   |                                   |  |                    |  |
| WASTE OUTPUT   | none             |                   |                                   |  |                    |  |
| RECYCLE  | NA               | L                 |                                   |  |                    |  |
| POTENT   | TAL HAPS IN PROC | ESSING STREAMS    |                                   |  |                    |  |
| HAPS DESCRIPTION   |                  | HAP CAS<br>NUMBER | FRACTION IN INP<br>STREAM BY WEIG | JT FRACTION IN PRODUC<br>HT STREAM BY WEIGHT | CTFRACTION IN WAST | E FRACTION IN RECYCLE T STREAM BY WEIGHT |
| F  |                  |                   |                                   |  |                    |  |
| None   |                  |                   |                                   |  |                    |  |
|  |                  |                   |                                   |  |                    |  |
|  |                  |                   |                                   |  |                    |  |
|  |                  |                   |                                   |  |                    |  |
|  |                  |                   |                                   |  |                    |  |

#### SECTION 3-2, PART B, BARK HOG

| SECTION 3-2, PART B, BARK HOG                 |              |                    |                       |          |              |           |
|---|--------------|--------------------|-----------------------|----------|--------------|-----------|
| OPERATING DATA PERCENT PRODUCTION PER QUARTER | OPERATIN     | IG SCHEDULE, TYPIC | AL                    |          |              |           |
| DEC-FEB 25                                    | HOURS/DA     | ΑΥ                 | 16                    |          |              |           |
| MAR-MAY 25                                    | DAY/WEE      | <                  | 7                     |          |              |           |
| JUN-AUG 25                                    | WEEKS/YE     | EAR                | 52                    |          |              |           |
| SEP-NOV 25                                    |              |                    |                       |          |              |           |
| 011 1101                                      | MENT         |                    |                       |          |              |           |
| POLLUTION CONTROL EQUIP<br>PARAMETER          | PRIMARY      |                    | SECONDA               | ARY      |              |           |
| TYPE  | Enclosure    |                    | NONE                  |          |              |           |
| TYPE CODE (FROM APP. A)                       |              |                    |                       | <u> </u> |              |           |
| MANUFACTURER                                  |              |                    |                       |          |              |           |
| MODEL NUMBER                                  |              |                    |                       |          |              |           |
| PRESSURE DROP (IN. OF WATER)                  |              |                    |                       | ]        |              |           |
| WET SCRUBBER FLOW (GPM)                       |              |                    |                       | ]        |              |           |
| BAGHOUSE AIR/CLOTH RATION (FPM)               |              |                    |                       |          |              |           |
| VENTILATION AND BUILDING                      | ADEA DATA    | STACI              | C DATA                |          |              |           |
|   | N/A          | GROUND ELEVATI     | ON (FT)               |          | 2,306        |           |
| ENCLOSED (Y/N)?                               | N/A          | UTM X COORDINA     |                       |          | 518.5        |           |
| HOOD TYPE (FROM APP. B)                       | N/A          | UTM Y COORDINA     |                       |          | 5,300.8      |           |
| MINIMUM FLOW (ACFM)                           | N/A          | STACK TYPE (SEE    |                       |          | 05           |           |
| PERCENT CAPTURE EFFICIENCY                    | N/A          |                    | HT FROM GROUND LEVEL  | (FT)     | N/A          |           |
| BUILDING HEIGHT (FT)                          | N/A          | STACK EXIT DIAM    |                       |          | N/A          |           |
| BUILDING/AREA LENGTH (FT)                     | N/A          |                    | FLOWRATE (ACFM)       |          | N/A          |           |
| BUILDING/AREA WIDTH (FT)                      | 19/1         |                    | PERATURE (DEG. F)     |          |              |           |
| AIR POLLUTANT EMISSIONS                       |              |                    |                       |          |              |           |
| OAC NUMBER                                    | EMISSION     | PERCENT            | ESTIMATED OR          | ALLO     | OWABLE EMISS | IONS      |
| POLLUTANT CAS NUMBER                          | FACTOR       | CONTROL            | MEASURED<br>EMISSIONS | (LBS/HR) | (TONS/YR)    | REFERENCE |
|   | (SEE BELOW)  | EFFICIENCY         | (LBS/HR)              |          |              | AUDC      |
| PM  | 0.01 lb/ton  | 90%                | 0.27                  | 0.27     | 1.17         | AIRS      |
| PM <sub>10</sub>                              | 0.005 lb/ton | 90%                | 0.13                  | 0.13     | 0.59         | AIRO      |
| SO <sub>2</sub>                               |              |                    |                       |          |              |           |
| co  |              |                    |                       |          |              |           |
| NOX   |              |                    |                       |          |              |           |
| VOC   |              |                    |                       |          |              |           |
| LEAD  |              |                    |                       |          |              |           |
|   |              |                    |                       |          |              |           |
|   |              |                    |                       |          |              |           |
|   |              | ,                  |                       |          |              |           |
|   |              |                    |                       |          |              |           |
|   |              |                    |                       |          |              |           |

NOTE: STACK TYPE - 01) DOWNWARD; 02) VERTICAL (UNCOVERED); 03) VERTICAL (COVERED); 04) HORIZONTAL; 05) FUGITIVE EMISSION FACTOR IN LBS/UNITS. PLEASE USE SAME HOURLY UNITS GIVEN IN FUEL DATA SECTION.

### LOGS AND BARK, FUGITVE EMISSIONS

| <u>DEBARKER</u> |
|-----------------|
|-----------------|

1,170,000 Tons of Logs/Year 8,760 Hours/Year

TSP:

Emission Factor:

0.02 lbs/ton

AIRS 3-07-008-01

Emissions:

11.70 tons/year 64.11 lbs/day

2.67 lbs/hr

PM10:

Emission Factor: Emissions:

0.011 lbs/ton 6.44 tons/year 35.26 lbs/day 1.47 lbs/hr

AIRS 3-07-008-01

BARK HOG

234,000 Tons of Bark/Year

TSP:

Emission Factor: Emissions:

0.01 lbs/ton 1.17 tons/year 6.41 lbs/day

General Material Handling Factor Bark Hog will be enclosed, 90% control.

0.27 lbs/hr

PM10:

Emission Factor: Emissions:

0.005 lbs/ton 0.59 tons/year 3.21 lbs/day 0.13 lbs/hr

General Material Handling Factor Bark Hog will be enclosed, 90% control.

HOG FUEL TRANSFER TO FUEL HOUSE

187,200 Tons of Bark/Year 80% of total bark, assumed

TSP:

Emission Factor: Control from Enc. EF Corrected Emissions:

0.1 lbs/ton General Material Handling Factor 80% Fuel House Enclosed on three sides. 0.02 lbs/ton 2.34 tops/size

2.34 tons/year 12.82 lbs/day

PM10:

Emission Factor: Control from Enc. EF Corrected Emissions:

General Material Handling Factor 0.05 lbs/ton 80% Fuel House Enclosed on three sides. 0.01 lbs/ton

1.17 tons/year 6.41 lbs/day 0.27 lbs/hr

0.53 lbs/hr

HOG FUEL CYCLONE/FILTER

TSP:

Design Capacity Annuai max.

6000 scf/min 50 ton per hour, capacity 234,000 ton per year

Emission Factor:

0.015 gr/dscf 2.03 tpy 11.11 lbs/day

Idaho DEQ, Permit Calculations

Emission Factor: PM10:

Emissions:

Emissions:

0.46 lb/hr 0.011 gr/dscf 1.49 tpy 8.15 lbs/day

0.34 lb/hr

Idaho DEQ, Permit Calculations

HOG FUEL BIN TRUCK LOADOUT

46,800 Tons of Hog Fuel per Year 20% of total bark, assumed

TSP:

Emission Factor: Emissions:

0.05 lbs/ton 1.17 tons/year Idaho DEQ Factor. Sides of loadout blocked from wind, 50% control.

6.41 lbs/day

0.27 lbs/hr

PM10:

Emission Factor: Emissions:

0.025 lbs/ton 0.59 tons/year 3.21 lbs/day 0.13 lbs/hr

Idaho DEQ Factor. Sides of loadout blocked from wind, 50% control.

# SECTION 3-3: PROCESS AND MANUFACTURING OPERATIONS

| DEQ USE ONLY         |                      |                   |                   |                         |                       |                      |
|----------------------|----------------------|-------------------|-------------------|-------------------------|-----------------------|----------------------|
| DEQ PLANT ID CODE    |                      | DEQ PROCESS CODE  |                   | DEQ STACK ID C          |                       |                      |
| DEQ BUILDING ID CODE |                      | PRIMARY SCC       |                   | SECONDARY S             | SCC                   |                      |
| DEQ SEGMENT CODE     |                      |                   |                   |                         |                       |                      |
|                      |                      |                   |                   |                         |                       |                      |
|                      |                      |                   |                   |                         |                       |                      |
| PART A: GENERA       | L INFORMATION        |                   |                   |                         |                       |                      |
| PROCESS CODE OR DES  | SCRIPTION            | Sawmill Sawmill,  | Sawmill Screen (d | classifier) and Sawmill | Chipper               |                      |
| STACK DESCRIPTION    |                      | NONE              |                   |                         |                       |                      |
| BUILDING DESCRIPTION | I                    | Sawmill Building  |                   |                         |                       | 1005                 |
| MANUFACTURER         | Various              |                   | MODEL             | Various                 | DATE INSTALLED        | 1995                 |
| MANOLYGICA           |                      |                   |                   |                         | DATE LAST MODIFIED    | Not modified.        |
| PROCES               | SSING DATA           |                   |                   |                         |                       |                      |
| PROCESS STREAM       | MATERIAL             | MAXIMUM           | ACTUAL            | ACTUAL                  | UNITS                 |                      |
| PROCESS STREAM       | DESCRIPTION          | HOURLY            | HOURLY<br>RATE    | ANNUAL<br>RATE          |                       |                      |
|                      |                      | RATE              | TOTAL .           | 1,170,0                 | 00 tons/year          |                      |
| INPUT                | peeled logs          |                   |                   | 325,0                   |                       |                      |
| PRODUCT OUTPUT       | green lumber         |                   |                   | 250,7                   |                       |                      |
| BYPRODUCT OUTPUT     | chips                |                   |                   | 106,1                   |                       |                      |
| BYPRODUCT OUTPUT     | sawdust              |                   |                   | 100,1                   | 11 (3.13.)33          |                      |
|                      | TIAL HAPS IN PROC    | ESSING STREAMS    |                   |                         |                       |                      |
| POILN                | TIAL TIAL S IN COLOR |                   | EDACTION IN IN    | DUT ERACTION IN PRO     | DDUCTFRACTION IN WAST | EFRACTION IN RECYCLE |
| HAPS DESCRIPTION     |                      | HAP CAS<br>NUMBER | STREAM BY WE      | IGHT STREAM BY WE       | IGHT STREAM BY WEIGH  | T STREAM BY WEIGHT   |
|                      |                      |                   |                   |                         |                       |                      |
| None                 |                      |                   |                   |                         |                       |                      |
|                      |                      |                   |                   |                         |                       |                      |
|                      |                      |                   |                   |                         |                       |                      |
|                      |                      |                   |                   |                         |                       |                      |
|                      |                      |                   |                   |                         |                       |                      |

### SECTION 3-3, PART B, SAWMILL

| PM  | ECTION 3-3, P  | ART B, SAWMILL                     |                    |                 |                       |               |                  |           |
|---|--|------------------------------------|--------------------|-----------------|-----------------------|---------------|------------------|-----------|
| DAYWEEK   T   | OI<br>PERCENT PRODUC   | PERATING DATA<br>CTION PER QUARTER | OPERATING :        | SCHEDULE, TYPIC | AL .                  |               |                  |           |
| MR-MAY 25 DAY-WEEK 7  JUN-AUG 25 WEEKS/VEAR 52  POLLUTION CONTROL EQUIPMENT PRIMARY SECONDARY  POLLUTION CONTROL EQUIPMENT PRIMARY SECONDARY  POLLUTION CONTROL EQUIPMENT PRIMARY PRESSURE DROP (IN. OF WATER)  MANUFACTURER  MODE NUMBER FLOW (GPM)  BAGHOUSE AIRCLOTH RATION (FPM)  WET SCRUBBER FLOW (GPM)  BAGHOUSE AIRCLOTH RATION (FPM)  WENT SCRUBBER FLOW (GPM)  BAGHOUSE AIRCLOTH RATION (FPM)  WE SCRUBBER FLOW (GPM)  BAGHOUSE AIRCLOTH RATION (FPM)  STACK EXIT TEMPERATURE (M)  DO S  STACK EXIT TEMPERATURE (DEC. F)  POLLUTANT CAS NUMBER  AIR POLLUTANT EMISSIONS (SAWMILL)  PM.  DO OODS INDON (GSE BELOW)  EMISSION  CAS NUMBER  AIR POLLUTANT EMISSIONS (GCREEN)  BUILDING CAS NUMBER  AIR POLLUTANT EMISSIONS (CHIPPER)  AIR POLLUTANT CAS NUMBER  AIR POLLUTANT EMISSIONS (CHIPPER)  AIR POLLUTANT CAS NUMBER  AIR POLLUTANT EMISSIONS (CHIPPER)  AIR POLLUTANT CAS NUMBER  BMSSION CONTROL MEASURED  AIR POLLUTANT EMISSIONS (CHIPPER)  AIR POLLUTANT EMISSIONS (CHIPPER)  AIR POLLUTANT CAS NUMBER  BMSSION CONTROL MEASURED  AIR POLLUTANT CAS NUMBER  BM          | SEC EEB  | 25                                 | HOURS/DAY          |                 | 16                    |               |                  |           |
| SEP-NOV   25  | _  |                                    | DAY/WEEK           |                 | 7                     |               |                  |           |
| SEPANOV   25   POLLUTION CONTROL EQUIPMENT   PRIMARY   SECONDARY   PRIMARY   NONE   PRIMARY   NONE   PRIMARY   PRIMARY   PRIMARY   NONE   PRIMARY   PRIMAR            | _  |                                    | WEEKS/YEAT         | ₹               | 52                    |               |                  |           |
| POLLUTION CONTROL EQUIPMENT   | _  |                                    |                    |                 |                       |               |                  |           |
| PARAMETER   | -  |                                    |                    |                 |                       |               |                  |           |
| PARAMETER  TYPE CODE (FROM APP. A)  MANUFACTURER  MODEL NUMBER  PRESSURED GROP (IN. OF WATER)  WET SCRUBBER FLOW (GPM)  BAGHOUSE AIR/CLOTH RATION (FPM)  VENTILATION AND BUILDING/AREA DATA (SAWMILL)  PROCEST (FROM APP. B)  MINMUM FLOW (ACFM)  PERCENT CAPTURE EFFICIENCY  BUILDING/AREA URGTH (FT)  BUILDING/BREA URGTH (FT)  BUILDING          |  | OLLUTION CONTROL EQUI              | PRIMARY            |                 | SECONDA               | ARY           |                  |           |
| TYPE CODE (FROM APP. A)  MANUFACTURER  MODEL NUMBER  PRESSURE DROP (IN. OF WATER)  WET SCRUBBER FLOW (GPM)  STACK DATA  WENTLATION AND BUILDING/AREA DATA (SAWMILL)  PERCENT CAPTURE EFFICIENCY  99  STACK EXIT FLOW (M)  STACK EXIT FLOW (M)  BUILDING FLOW (FT)  NAA  WET STACK EXIT FLOW GROUND LEVEL (FT)  NAA  WET STACK EXIT TEMPERATURE (DEG. F)  PULLUTANT  AIR POLLUTANT EMISSIONS (SAWMILL)  POLLUTANT EMISSIONS (SREEN)  PACTOR  CONTROL  MEASURED  LISSINN  (LBS/HR)  (TONS/YR)  REFERENCE  (LBS/HR)  (TONS/YR)  REFERENCE  PM  DO11   Inhon chips  | PARAMETER  |                                    |                    |                 | NONE                  |               |                  |           |
| MANUFACTURER  MODEL NUMBER  PRESSURE DROP (INL OF WATER)  WET SCRUBBER FLOW (GPM)  BAGHOUSE AIR/CLOTH RATION (FPM)  WET SCRUBBER FLOW (GPM)  BAGHOUSE AIR/CLOTH RATION (FPM)  WENTLIATION AND BUILDING/AREA DATA (SAWMILL)  ENCLOSED (Y/N?)  HOOD TYPE (FROM APP. B)  UTM X COORDINATE (KM)  MINIMUM FLOW (ACFM)  UTM Y COORDINATE (KM)  MINIMUM FLOW (ACFM)  UTM Y COORDINATE (KM)  MINIMUM FLOW (ACFM)  BUILDING HEIGHT (FT)  BUILDING/AREA LENGTH (FT)  BUILDING/AREA LENGTH (FT)  BUILDING/AREA LENGTH (FT)  STACK EXIT TEMPERATURE (DEG. F)  POLLUTANT  CAS NUMBER  EMISSION  FACTOR  CONTROL  MEASURED  MIR POLLUTANT EMISSIONS (SCREM)  POLLUTANT  CAS NUMBER  EMISSION  FACTOR  CONTROL  MEASURED  MEASURED  MIR POLLUTANT EMISSIONS (SCREM)  POLLUTANT  CAS NUMBER  EMISSION  FACTOR  CONTROL  MEASURED  MEASURED  MEASURED  MEASURED  MEASURED  MEASURED  ALLOWABLE EMISSIONS  (LBS/HR)  (TONS/YR)  REFERENCE  MEASURED  MEASURED  MEASURED  MEASURED  MEASURED  MEASURED  ALLOWABLE EMISSIONS  (LBS/HR)  (TONS/YR)  REFERENCE  MEASURED  MEASURED  MEASURED  ALLOWABLE EMISSIONS  (LBS/HR)  (TONS/YR)  REFERENCE  MEASURED  MEASURED  MEASURED  ALLOWABLE EMISSIONS  (LBS/HR)  (TONS/YR)  REFERENCE  MEASURED  MEASURED  MEASURED  MEASURED  ALLOWABLE EMISSIONS  (LBS/HR)  (TONS/YR)  REFERENCE  MEASURED  MEASURED  MEASURED  MEASURED  MEASURED  MEASURED  MEASURED  ALLOWABLE EMISSIONS  (LBS/HR)  (TONS/YR)  REFERENCE  MEASURED  ME          |  |                                    | Lilototais         |                 |                       | ]             |                  |           |
| MODEL NUMBER         PRESSURE DROP (IN. OF WATER)   |  |                                    |                    |                 |                       |               |                  |           |
| PRESSURE DROP (IN. OF WATER)  | MANUFACTURER   |                                    |                    |                 |                       |               |                  |           |
| WET SCRUBBER FLOW (GPM)   |  |                                    |                    |                 |                       | ]             |                  |           |
| VENTILATION AND BUILDING/AREA DATA (SAWMILL)   STACK DATA   | and the second s |                                    |                    |                 |                       |               |                  |           |
| STACK PATA    POLLUTANT EMISSIONS   SAWMILL    POLLUTANT EMISSIONS   SEEBLOW    POLLUTANT EMISSI             |  |                                    |                    |                 |                       | ]             |                  |           |
| VENTILATION AND BUILDING/AREA BATA (SAWMILL)   GROUND ELEVATION (FT)   2,306  | BAGHOUSE AIR/G   | CLOTH RATION (FPM)                 |                    |                 |                       |               |                  |           |
| POLLUTANT   POLLUTANT EMISSIONS (SAREN)   | VENTU ATION A  | AND BUILDING/AREA DATA             | (SAWMILL)          | _               |                       |               | 2 306            |           |
| MINIMUM FLOW (ACFM)   |  |                                    | Y                  |                 |                       |               |                  |           |
| MINIMUM FLOW (ACFM)   |  |                                    |                    |                 |                       |               |                  |           |
| PERCENT CAPTURE EFFICIENCY  |  |                                    |                    |                 |                       |               |                  |           |
| ## DUILDING HEIGHT (FT)   |  |                                    | 99                 |                 |                       |               |                  |           |
| BUILDING/AREA LENGTH (FT)   289   STACK EXIT DIAMICTACY   |  |                                    | 36                 |                 |                       | _ (FI)        |                  |           |
| BUILDING/AREA WIDTH (FT)  115  STACK EXIT TEMPERATURE (DEG. F)  AIR POLLUTANT EMISSIONS (SAWMILL)  POLLUTANT  CAS NUMBER  EMISSION  FACTOR  (SEE BELOW)  PM  POLLUTANT  CAS NUMBER  AIR POLLUTANT EMISSIONS (SCREEN)  POLLUTANT  CAS NUMBER  EMISSION  EMISSION  PERCENT  ESTIMATED OR  (LBS/HR)  (LBS/HR)  (LBS/HR)  (170NS/YR)  REFERENCE  (LBS/HR)  (10005/11-17)  Idaho DEQ  PM  AIR POLLUTANT EMISSIONS (SCREEN)  FACTOR  CAS NUMBER  EMISSION  FACTOR  CAS NUMBER  EMISSION  EFFICIENCY  EMISSIONS  (LBS/HR)  (LBS/HR)  (TONS/YR)  REFERENCE  EMISSIONS  ALLOWABLE EMISSIONS  |  |                                    | 289                |                 |                       |               |                  |           |
| POLLUTANT CAS NUMBER  AIR POLLUTANT EMISSIONS (SAWMILL)  EMISSION PERCENT CONTROL MEASURED  (SEE BELOW)  PM  PM  POLLUTANT EMISSIONS (Ib/fon logs P9% 0.47 0.47 0.47 0.20 Idaho DEQ  PM  PM  AIR POLLUTANT EMISSIONS (SCREEN)  CAS NUMBER  EMISSION PERCENT ESTIMATED OR ALLOWABLE EMISSIONS  (LBS/HR)  0.002 lb/fon logs P9% 0.27 0.27 1.17 idaho DEQ  PROCEDIT ESTIMATED OR ALLOWABLE EMISSIONS  (LBS/HR)  (LBS/HR)  (TONS/YR)  REFERENCE  (LBS/HR)  O.01 lb/fon chips 90% 0.29 0.29 1.25 Idaho DEQ  PM  AIR POLLUTANT EMISSIONS (CHIPPER)   |  |                                    | 115                |                 |                       |               | IN/A             |           |
| POLLUTANT   CAS NUMBER  | BUILDINGIAREA  | ( WID ITT (I T)                    |                    | STACK EXIT TEM  | PERATURE (DEG. F)     |               |                  |           |
| POLLUTANT   CAS NUMBER  |  |                                    | NE (SAMMILI)       |                 |                       |               | NAVADI E EMISSIC | NS.       |
| PM  |  |                                    | EMISSION           |                 |                       | ALLC          | MARIE EMISSIC    | 7143      |
| PM  | POLLUTANT  | CAS NUMBER                         |                    |                 |                       | (LBS/HR)      | (TONS/YR)        | REFERENCE |
| PM  |  |                                    | (SEE BELOW)        | EFFICIENCE      | (LBS/HR)              | 0.47          | 2.05             | Idaho DEQ |
| PM10  |  |                                    | 0.0035 lb/ton logs | 99%             |                       |               |                  |           |
| POLLUTANT CAS NUMBER  EMISSION PERCENT CONTROL EMISSIONS  (SEE BELOW)  PM  PM  AIR POLLUTANT EMISSIONS (CHIPPER)  AIR POLLUTANT EMISSIONS (CHIPPER)  AIR POLLUTANT EMISSIONS (CHIPPER)  AIR POLLUTANT CAS NUMBER  EMISSION PERCENT ESTIMATED OR ALLOWABLE EMISSIONS  (LBS/HR)  (LBS/HR)  (1005/YR)  REFERENCE  (LBS/HR)  0.29  1.25  Idaho DEQ  0.14  0.14  0.14  0.63  Idaho DEQ  PM 10  AIR POLLUTANT EMISSIONS (CHIPPER)  POLLUTANT CAS NUMBER  EMISSION PERCENT ESTIMATED OR MEASURED  ALLOWABLE EMISSIONS  PERCENT ESTIMATED OR MEASURED   |  |                                    | 0.002 lb/ton logs  | 99%             | 0.27                  | 0.27          | 1.17             | 144115    |
| POLLUTANT CAS NUMBER    EMISSION   PERCENT   CONTROL   MEASURED   (LBS/HR)   (TONS/YR)   REFERENCE   (LBS/HR)           | PM <sub>10</sub>   |                                    | NO (CORECN)        |                 |                       |               |                  | ONE       |
| PM  |  |                                    | EMISSION           | PERCENT         |                       | ALL           | OMARLE EMISSI    | DINO      |
| PM  | POLLUTANT  | CAS NUMBER                         |                    | _               |                       | (LBS/HR)      | (TONS/YR)        | REFERENCE |
| PM  |  |                                    | (SEE BELOW)        | EFFICIENCI      | (LBS/HR)              | 0.00          | 1 25             | Idaho DEQ |
| PM <sub>10</sub> AIR POLLUTANT EMISSIONS (CHIPPER)  POLLUTANT  CAS NUMBER  EMISSION  PERCENT  CONTROL  MEASURED  CONTROL  CONTROL | D14  |                                    | 0.01 lb/ton chips  | 90%             |                       |               |                  |           |
| AIR POLLUTANT EMISSIONS (CHIPPER)  POLLUTANT CAS NUMBER EMISSION PERCENT ESTIMATED OR ALLOWABLE EMISSIONS  POLLUTANT CAS NUMBER EMISSION PERCENT MEASURED (TONISME) REFERENCE   |  |                                    | 0.005 lb/ton chips | 90%             | 0.14                  | 0.14          | 0.00             |           |
| POLLUTANT CAS NUMBER  EMISSION PERCENT ESTIMATED ON  FACTOR CONTROL MEASURED  (TONISME) REFERENCE  (TONISME) REFER          | PM <sub>10</sub>   |                                    | AND (CHIRDER)      |                 |                       |               |                  |           |
| POLLUTANT CAS NUMBER EMISSION CONTROL MEASURED (TONISME) REFERENCE  |  | AIR POLLUTANT EMISSIO              |                    | PERCENT         | ESTIMATED OR          | ALI           | OWABLE EMISS     | IONS      |
| TOATAL THE PROPERTY OF THE PRO          | POLLUTANT  | CAS NUMBER                         | EMISSION<br>FACTOR |                 | MEASURED              | (LBS/HR)      | (TONS/YR)        | REFERENCE |
| (SEE BELOW) EFFICIENCY EMISSIONS (EDG/11.1)   |  |                                    |                    | EFFICIENCY      |                       | (LDOTTIN)     |                  | ·         |
| 0.29 0.29 1.25 Idano DEG  |  |                                    | 0.01 lb/ton chip   | s 90%           |                       | 0.29          |                  | Idaho DEQ |
| PM 0.005   Ib/ton chips 90% 0.14 0.14 0.63   Idaho DEC  | PM   |                                    |                    |                 | 0.14                  | 0.14          | 0.63             | Idaho DEQ |
| PM <sub>10</sub> PM <sub>10</sub> OTACK TYPE 01) DOWNWARD: 02) VERTICAL (UNCOVERED); 03) VERTICAL (COVERED); 04) HORIZONTAL; 05) FUGITIVE   | PM <sub>10</sub>   |                                    |                    |                 | DEICAL (COVEDED): 04\ | HORIZONTAL: 0 | 5) FUGITIVE      |           |

STACK TYPE - 01) DOWNWARD; 02) VERTICAL (UNCOVERED); 03) VERTICAL (COVERED); 04) HORIZONTAL; 05) FUGITIVE EMISSION FACTOR IN LBS/UNITS. PLEASE USE SAME HOURLY UNITS GIVEN IN FUEL DATA SECTION.

NOTE:

#### SAWMILL PROCESSES

#### SAWMILL, INDOOR

1,170,000 Tons of Logs/Year

TSP:

Emission Factor:

Corrected Factor: Emissions:

0.35 lbs/ton 0.0035 lbs/ton

11.22 lbs/day 0.47 lbs/hr

Idaho Factor

Indoors with pneumatic dust pickup. 99% removal efficiency.

2.05 tons/year

PM10:

Emission Factor:

Corrected Factor: Emissions:

0.2 lbs/ton 0.002 lbs/ton 1.17 tons/year Idaho Factor

Indoors with pneumatic dust pickup. 99% removal efficiency.

6.41 lbs/day

0.27 lbs/hr

### SAWMILL SCREEN (CLASSIFIER), INDOOR

250,792 Tons of Chips/Year

TSP:

**Emission Factor:** 

Corrected Factor:

0.1 lbs/ton 0.01 lbs/ton General Material Handling Factor Enclosed process, 90% control.

Emissions:

1.25 tons/year 6.87 lbs/day

0.29 lbs/hr

PM10:

Emission Factor: Corrected Factor:

Emissions:

0.05 lbs/ton 0.005 lbs/ton

0.63 tons/year 3.44 lbs/day

0.14 lbs/hr

General Material Handling Factor Enclosed process, 90% control.

General Material Handling Factor

Enclosed process, 90% control.

#### SAWMILL CHIPPER, INDOOR

250,792 Tons of Chips/Year

TSP:

Emission Factor: Corrected Factor:

Emissions:

0.1 lbs/ton 0.01 lbs/ton

1.25 tons/year

PM10:

Emission Factor: Corrected Factor:

Emissions:

6.87 lbs/day

0.63 tons/year

3.44 lbs/day 0.14 lbs/hr

0.29 lbs/hr

General Material Handling Factor Enclosed process, 90% control.

0.05 lbs/ton 0.005 lbs/ton

# SECTION 3-4: PROCESS AND MANUFACTURING OPERATIONS

| DEQ USE ONLY  |                      |                                      | OW ID OOD                              |   |  |
|---|----------------------|--------------------------------------|--|---|--|
| DEQ PLANT ID CODE   | DEQ PROCESS CODE     |                                      | DEQ STACK ID COD<br>SECONDARY SCC      |   |  |
| DEQ BUILDING ID CODE  | PRIMARY SCC          |                                      | SECONDART SCC                          | ' <u>                                      </u> |  |
| DEQ SEGMENT CODE  |                      |                                      |  |   |  |
|   |                      |                                      |  |   |  |
| PART A: GENERAL INFORMA   | TION                 |                                      |  |   |  |
| PROCESS CODE OR DESCRIPTION   | Lumber Drying Kilns  |                                      |  |   |  |
| STACK DESCRIPTION   | Multiple roof vents. |                                      |  |   |  |
| BUILDING DESCRIPTION  | Four kilns with comm | non walls.                           |  |   | Sep-04                                   |
| MANUFACTURER  |                      | MODEL                                |  | DATE INSTALLED                                  | Not modified.                            |
|   |                      |                                      | DA                                     | TE LAST MODIFIED                                | Not modified.                            |
| PROCESS STREAM MATERI DESCRIP   | AL MAXIMUM           | ACTUAL<br>HOURLY                     | ACTUAL<br>ANNUAL                       | UNITS   |  |
| INPUT green lumb PRODUCT OUTPUT dry lumber WASTE OUTPUT none RECYCLE NA | RATE  Der            | RATE                                 | RATE 325,000 325,000                   | mbdft/yr<br>mbdft/yr                            | <b> </b>                                 |
|   |                      |                                      |  |   |  |
| POTENTIAL HAPS I  | N PROCESSING STREAMS |                                      |  |   | EEED ACTION IN BECVOL                    |
| HAPS DESCRIPTION  | HAP CAS<br>NUMBER    | FRACTION IN INPUT<br>STREAM BY WEIGH | FRACTION IN PRODU<br>T STREAM BY WEIGH | TO STREAM BY WEIGH                              | TEFRACTION IN RECYCLI T STREAM BY WEIGHT |
| None  |                      |                                      |  |   |  |
|   |                      |                                      |  |   |  |
|   |                      |                                      |  |   | ]  |

| SECTION 3-4, PART B, LUMBER DRYING  | KILNS   |                                  |   |          |   |           |
|---|---|----------------------------------|---|----------|---|-----------|
| OPERATING DATA PERCENT PRODUCTION PER QUARTER   | OPERATING   | SCHEDULE, TYPICA                 | L   |          |   |           |
| DEC-FEB 25  MAR-MAY 25  JUN-AUG 25  SEP-NOV 25  | HOURS/DAY<br>DAY/WEEK<br>WEEKS/YE/                      |                                  | 7<br>7<br>52  |          |   |           |
| POLLUTION CONTROL EQUIP PARAMETER TYPE TYPE CODE (FROM APP. A) MANUFACTURER MODEL NUMBER PRESSURE DROP (IN. OF WATER) WET SCRUBBER FLOW (GPM) BAGHOUSE AIR/CLOTH RATION (FPM) | MENT PRIMARY  None                                      |                                  | SECONDA<br>NONE   | ]        |   |           |
| VENTILATION AND BUILDING  | AREA DATA   | STACK                            | DATA (KILN VENTS)   |          |   |           |
| ENCLOSED (Y/N)? HOOD TYPE (FROM APP. B) MINIMUM FLOW (ACFM) PERCENT CAPTURE EFFICIENCY BUILDING HEIGHT (FT) BUILDING/AREA LENGTH (FT) BUILDING/AREA WIDTH (FT)                | N/A N/A N/A N/A N/A N/A N/A N/A                         | STACK EXIT DIAMI                 | TE (KM)<br>TE (KM)<br>NOTE BELOW)<br>HT FROM GROUND LEVEL | (FT)     | 2,306<br>518.6<br>5,301.1<br>05<br>27.5<br>2.5<br>15,000<br>170 |           |
| AIR POLLUTANT EMISSIONS   | 3   |                                  |   | Δ11      | OWABLE EMISSI   | ONS       |
| POLLUTANT CAS NUMBER  | EMISSION<br>FACTOR<br>(SEE BELOW)                       | PERCENT<br>CONTROL<br>EFFICIENCY | ESTIMATED OR<br>MEASURED<br>EMISSIONS<br>(LBS/HR)         | (LBS/HR) | (TONS/YR)   | REFERENCE |
| PM PM <sub>10</sub> SO <sub>2</sub> CO NOX VOC LEAD HAPS See Spreadsheet  | 0.11 lb/mbdft 0.11 lb/mbdft 0.11 lb/mbdft 0.82 lb/mbdft | 0%                               | 4.08<br>4.08  | 30.4     | 17.9  | U of O    |

NOTE: STACK TYPE - 01) DOWNWARD; 02) VERTICAL (UNCOVERED); 03) VERTICAL (COVERED); 04) HORIZONTAL; 05) FUGITIVE EMISSION FACTOR IN LBS/UNITS. PLEASE USE SAME HOURLY UNITS GIVEN IN FUEL DATA SECTION.

#### LUMBER DRY KILNS

#### 325,000 mbdft/yr, lumber dried

#### CRITERIA POLLUTANTS

PM:

Emission Factor:

Emissions:

0.11 lbs/1000 bd.ft. 17.88 tons/year

97.95 lbs/day 4.08 lbs/hr

PM10:

Emission Factor:

Emissions:

0.11 lbs/1000 bd.ft.

17.88 tons/year 97.95 lbs/day

4.08 lbs/hr \* ORCAA is the Olympic Region Clear Air Agency, previously known as the Olympic Air Pollution Control Authority.

VOC:

Emission Factor: Emissions:

0.82 lbs/1000 bd.ft. 133.09 tons/year

729.25 lbs/day 30.39 lbs/hr

OSU Dry Kiln VOC Study VOC Emissions based on

ORCAA Dry Kiln Factor\*

ORCAA Dry Kiln Factor\*

mix shown below.

| Vood Species:          | % of Total | (lb/MBdft)        | Weighted<br>(lb/Mbdft) |
|------------------------|------------|-------------------|------------------------|
| Redwood                | 0%         | 0.12              | 0.00                   |
| Cedar                  | 0%         | 0.12              | 0.00                   |
| Douglas Fir Sap Wood   | 0%         | 0.21              | 0.00                   |
| Hemlock                | 0%         | 0.24              | 0.00                   |
| Coastal Douglas Fir    | 0%         | 0.34              | 0.00                   |
| Grand Fir              | 30%        | 0.53              | 0.16                   |
| * White Fir            | 0%         | 0.26              | 0.00                   |
| Douglas Fir Heart Wood | 30%        | 0.46              | 0.14                   |
| * Ponderosa Pine       | 30%        | 1.38              | 0.41                   |
| *Lodgepole Pine        | 10%        | 1.08              | 0.11                   |
| Sugar Pine             |            | 2.07              | 0.00                   |
| White Pine             | 0%         | 2.26              | 0.00                   |
| Other                  | 0%         | 1.50              | 0.00                   |
| Total                  |            |                   | 0.82                   |
|                        |            | U/IFA study. VOCs | as carbon lb/mbf       |

ES/LP/AF: Englemann Spruce, Lodgepole Pine and Alpine Fir = WW or whitewood FL: Douglas Fir and Western Larch PP: Ponderosa Pine only

(one third of ES/LP/AF)

HF: Western Hemlock and Grand Fir

#### HAZARDOUS AIR POLLUTANTS (HAPS)

PHENOL:

Emission Factor: Emissions:

0.004 lbs/1000 bd.ft.

0.65 tons/year 3.56 lbs/day 0.15 lbs/hr

ORCAA Dry Kiln Factor\*

METHANOL:

Emission Factor:

Fmissions:

0.06 lbs/1000 bd.ft. 9.75 tons/year 53,42 lbs/day

OSU Dry Kiln VOC Study Methanol emissions based on mix shown below.

FORMALDEHYDE:

Emission Factor:

0.004 lbs/1000 bd.ft. 0.65 tons/year 3.56 lbs/day

0.148 lbs/hr

2.23 lbs/hr

OSU Dry Kiln VOC Study Formaldehyde emissions based on

mix shown below.

|                          | Methanol   |            |          |            | Formaldehyde |  |
|--------------------------|------------|------------|----------|------------|--------------|--|
| Wood Species:            | % of Total | (lb/MBdft) | Weighted | (lb/MBdft) | Weighted     |  |
|                          | 30%        | 0.023      | 0.007    | 0.001      | 0.0003       |  |
| Grand Fir**              | 0%         | 0.122      | 0.000    | 0.003      | 0.0000       |  |
| * White Fir              |            | 0.023      | 0.007    | 0.001      | 0.0003       |  |
| * Douglas Fir Heart Wood |            | 0.065      | 0.020    | 0.003      | 0.0009       |  |
| Ponderosa Pine           |            | 0.060      | 0.006    | 0.004      | 0.0004       |  |
| *Lodgepole Pine          |            | 0.060      | 0.000    | 0.060      | 0.0000       |  |
| Other                    | 0%         | 0,000      | 0.000    |            | 0.0019       |  |

Total 100% 0.0:
\* factors from 2000 Milota OSU/IFA study. VOCs as carbon lb/mbf

<sup>\*\*</sup> Use Douglas Fir factor for Grand Fir

# SECTION 3-5: PROCESS AND MANUFACTURING OPERATIONS

| DEQ USE ONLY  DEQ PLANT ID CODE  DEQ BUILDING ID CODE  TO STOUGHT CODE                   |  | DEQ PROCESS CODE<br>PRIMARY SCC                              | :                                   | DEQ STACK ID CODE<br>SECONDARY SCC                |                                    |   |
|--|--|--|-------------------------------------|---|------------------------------------|---|
| PART A: GENERAL PROCESS CODE OR DESC STACK DESCRIPTION BUILDING DESCRIPTION MANUFACTURER |  | Planer Processes -<br>No Stacks. All proc<br>Planer Building | esses located indoor                | /arious   | DATE INSTALLED                     | Sep-04                                    |
| PROCESS STREAM INPUT PRODUCT OUTPUT  | MATERIAL DESCRIPTION  dry lumber  planed lumber  planer chips  planer shavings | MAXIMUM<br>HOURLY<br>RATE                                    | ACTUAL<br>HOURLY<br>RATE            | ACTUAL<br>ANNUAL<br>RATE  325,000  48,750  97,500 | UNITS  mbdft/yr mbdft/yr tons tons | Not modified.                             |
| POTENTIA<br>HAPS DESCRIPTION   | AL HAPS IN PROCESS   | HAP CAS NUMBER   | FRACTION IN INPU<br>STREAM BY WEIGH | T FRACTION IN PRODUCT IT STREAM BY WEIGHT         | STERACTION IN WASTE                | E FRACTION IN RECYCLE  T STREAM BY WEIGHT |

| OPERATING DATA PERCENT PRODUCTION PER QUARTER  DEC-FEB 25 HOURS/DAY 16 DAY/WEEK 7  JUN-AUG 25 WEEKS/YEAR 52  SEP-NOV 25  POLLUTION CONTROL EQUIPMENT PARAMETER PRIMARY  TYPE CODE (FROM APP. A)  OPERATING SCHEDULE, TYPICAL  HOURS/DAY 16 DAY/WEEK 7  WEEKS/DAY 52  SECONDARY  NONE NONE | SECTION 3-5, PART B, PLANER PROCES            | SS          |                    |                   |          |              |           |
|---|---|-------------|--------------------|-------------------|----------|--------------|-----------|
| DEC-FEB 25 HOURS/DAY 16  MAR-MAY 25 DAY/WEEK 7  JUN-AUG 25 WEKS/YEAR 52  SEP-NOV 25  POLLUTION CONTROL EQUIPMENT PARAMETER PRIMARY  TYPE TYPE CODE (FROM APP. A)  | OPERATING DATA PERCENT PRODUCTION PER QUARTER | OPERATIN    | NG SCHEDULE, TYPIC | AL                |          |              |           |
| MAR-MAY   |   | HOUR\$/D/   | AY                 | 16                |          |              |           |
| JUN-AUG         25         WEEKS/YEAR         52           SEP-NOV         25         SECONDARY           PARAMETER         PRIMARY         NONE           TYPE         None         Image: Code (FROM APP. A)  |   | DAY/WEE     | к 🗀                | 7                 |          |              |           |
| SEP-NOV 25  POLLUTION CONTROL EQUIPMENT PARAMETER PRIMARY TYPE TYPE CODE (FROM APP. A)  SECONDARY NONE  NONE  | Water   | WEEKS/Y     | EAR                | 52                |          |              |           |
| POLLUTION CONTROL EQUIPMENT PARAMETER PRIMARY  None  TYPE CODE (FROM APP. A)  SECONDARY  NONE  UNONE  | JOH NO C                                      |             |                    |                   |          |              |           |
| PARAMETER PRIMARY  NONE  TYPE  TYPE CODE (FROM APP. A)  |   | PMENT       |                    | OCCONIDA          | NDV      |              |           |
| TYPE TYPE CODE (FROM APP. A)  |   | PRIMARY     |                    |                   | 71/1     |              |           |
|   |   | None        |                    | NONE              | <br>1    |              |           |
|   | TYPE CODE (FROM APP. A)                       |             |                    | L                 |          |              |           |
| MANUFACTURER  | MANUFACTURER                                  |             |                    |                   |          |              |           |
| MODEL NUMBER  | MODEL NUMBER                                  |             |                    |                   | 1        |              |           |
| PRESSURE DROP (IN. OF WATER)  |   |             |                    | <u> </u>          | 1        |              |           |
| WET SCRUBBER FLOW (GPM)   |   |             |                    |                   | 1        |              |           |
| BAGHOUSE AIR/CLOTH RATION (FPM)   | BAGHOUSE AIR/CLOTH RATION (FPM)               |             |                    | <u> </u>          |          |              |           |
| VENTILATION AND BUILDING/AREA DATA STACK DATA  2,306  | VENTILATION AND BUILDING                      | G/AREA DATA |                    |                   |          | 2 306        |           |
| FNCLOSED (V/N)?  N/A GROUND ELEVATION (FT)  |   |             |                    |                   |          |              |           |
| HOOD TYPE (FROM APP. B)  N/A  UTM X COORDINATE (NW)   |   | N/A         |                    |                   |          |              |           |
| N/A UTM Y COORDINATE (KIM)  |   | N/A         |                    |                   |          |              |           |
| N/A STACK TYPE (SEE NOTE BELOW)   |   | N/A         |                    |                   | (ET)     |              |           |
| N/A STACK EXIT HEIGHT FROM GROUND LEVEL (17)  |   | N/A         |                    |                   | . (٢١)   |              |           |
| N/A STACK EXIT DIAMETER (FT)  |   | N/A         |                    |                   |          |              |           |
| N/A STACK EXIT GAS FLOWRATE (ACFW)  |   | N/A         |                    |                   |          |              |           |
| STACK EXIT TEMPERATURE (DEG. F)   |   |             | STACK EXIT TEM     | PERATURE (DEG. F) |          |              |           |
| AIR POLLUTANT EMISSIONS   | AIR POLLUTANT EMISSION                        | s           |                    |                   |          |              |           |
| PLANER, INDOOR There are no emissions from the planers because they are pneumatically controlled  |   |             | ally controlled    |                   |          |              |           |
| through the shavings transport system.  | through the shavings transport system.        |             |                    |                   |          |              |           |
| CAS NUMBER EMISSION PERCENT ESTIMATED OR ALLOWABLE EMISSIONS  |   | EMISSION    |                    |                   | ALLC     | WABLE EMISSI | ONS       |
| FACTOR CONTROL FAISURING (LBS/HR) (TONS/YR) REFERENCE   | POLLUTANT CAS NOMBER                          |             |                    |                   | (LBS/HR) | (TONS/YR)    | REFERENCE |
| (SEE BELOW) EFFICIENCY EMISSIONS (LBS/HR)   |   | (SEE BELOW) | EFFICIENCE         |                   |          |              |           |
| PM  | PM  |             |                    |                   |          |              |           |
| PM <sub>10</sub>  |   |             |                    |                   |          |              |           |
| SO <sub>2</sub>   |   |             |                    |                   |          |              |           |
|   | -   |             |                    |                   |          |              |           |
| NOX   |   |             |                    | <u></u>           |          |              |           |
| voc   |   |             |                    |                   |          |              |           |
| LEAD  |   |             |                    |                   |          |              |           |
|   |   |             |                    |                   |          |              |           |
|   |   |             |                    |                   | <u> </u> |              |           |
|   |   |             |                    |                   |          |              |           |
|   |   |             |                    | <u> </u>          |          |              |           |

STACK TYPE - 01) DOWNWARD; 02) VERTICAL (UNCOVERED); 03) VERTICAL (COVERED); 04) HORIZONTAL; 05) FUGITIVE EMISSION FACTOR IN LBS/UNITS. PLEASE USE SAME HOURLY UNITS GIVEN IN FUEL DATA SECTION. NOTE:

# SECTION 7-1: SOLID MATERIAL TRANSPORT, HANDLING, AND STORAGE

| DEQ USE ONLY   |  |                                 |    |
|--|--|---------------------------------|----|
| THE PROPERTY OF THE PROPERTY O | DEQ PROCESS CODE                                   | DEQ STACK ID CODE               |    |
| DEQ PLANT ID CODE  | PRIMARY SCC  | SECONDARY SCC                   |    |
| DEQ BUILDING ID CODE   |  |                                 |    |
| DEQ SEGMENT CODE   |  |                                 |    |
| A constitution of the cons |  |                                 |    |
| PART A: GENERAL INFORMATION  |  |                                 |    |
| PROCESS CODE OR DESCRIPTION  | Hogged Bark Handling                               |                                 |    |
| STACK DESCRIPTION  | Hog Fuel Cyclone/Filter Vents                      |                                 |    |
| BUILDING DESCRIPTION   |  |                                 |    |
| DATE INSTALLED   | Oct-04 DATE LAST MODIFIED                          | NA                              |    |
| MATERIAL DESCRIPTION   | Hogged Bark  |                                 |    |
| MATERIAL TRANSFER RATES  |  |                                 |    |
|  | 50   |                                 |    |
| MAXIMUM HOURLY TRANSFER RATE (UNITS/HOUR)  | NA NA  |                                 |    |
| NORMAL HOURLY TRANSFER RATE (UNITS/HOUR)   | 187,200  |                                 |    |
| NORMAL ANNUAL TRANFER RATE (UNITS/YEAR)  | tons/year  |                                 |    |
| UNITS OF MEASURE   |  |                                 |    |
| BELT CONVEYOR/VEHICLE TRANSFE  | R - None. Bark is transported pneumatically.       |                                 |    |
| MATERIAL M   | MOISTURE   | MAXIMUM HOURLY WIND SPEED (MPH) |    |
| CONTENT (  | WEIGHT PERCENT)                                    | AVERAGE HOURLY                  |    |
| CONVEYORS ENCLOSED? (Y/N)  | CONVEYORS IN BUILDINGS? (Y/N)                      | WIND SPEED (MPH)                |    |
| TRANSFERS ENCLOSED? (Y/N)  | TRANSFERS IN BUILDINGS? (Y/N)                      |                                 |    |
| PNEUMATIC CONVEYOR TRANSFERS   | S Hog Fuel Cyclone/Filter                          |                                 |    |
| MATERIAL MOISTURE CONTENT (WEIGHT PERCENT)   | 45%  |                                 |    |
|  |  | PERCENT EFFICIENCY 80%          |    |
| PRIMARY SEPARATOR TYPE   | FilterSECONDARY SEPARA                             | TOR PERCENT EFFICIENCY 99.5%    |    |
| SECONDARY SEPARATOR TYPE   |  |                                 |    |
| MATERIAL STORAGE DATA Hog Fu   | tel Bin, Estimate 20% of hog fuel goes to truck fi | PILE LENGTH (FT)  NA  NA        |    |
| PILE? (Y/N)  | STORAGE CAPACITY 45 Units                          | 1                               | =_ |
| SILO? (Y/N)  | STORAGE CAPACITY UNITS 200 ft <sup>3</sup> /u      | PILE HEIGHT (FT) NA             | 一  |
| OTHER STORAGE TYPE DESCRIPTION   |  |                                 |    |
| MATERIAL STORAGE DATA Hog Fi   | uel House, Estimate 80% of hog fuel goes to fue    | NA PILE LENGTH (FT)             |    |
| PILE? (Y/N)  | STORAGE CAPACITY 1,0                               | 1100                            | == |
| SILO? (Y/N)  | STORAGE CAPACITY UNITS to                          | 115                             |    |
| OTHER STORAGE TYPE DESCRIPTION Building used to  | house fuel for boiler.                             | PILE HEIGHT (FT) NA             |    |
|  |  |                                 |    |
| MATERIAL DATA  | HAP CAS  | HAP FRACTION IN                 |    |
| HAP DESCRIPTION  | NUMBER   | MATERIAL BY WEIGHT              |    |
| NONE   |  |                                 |    |
| NONE   |  |                                 |    |
| NONE   |  |                                 |    |
|  |  |                                 |    |
| NONE   |  |                                 |    |
| NONE   |  |                                 |    |
| DAOIAL   |  |                                 |    |

### SECTION 7-1, PART B, HOGGED BARK HANDLING

| SECTION 7-1,   | PART B, HOGGED BARK H.   | ANDLING   |  |   |                 |  |                  |
|--|--|---|--|---|-----------------|--|------------------|
| PERCENT FUEL (   | OPERATING DATA<br>CONSUMPTION PER QUARTER                                      | OPERATING   | SCHEDULE   |   |                 |  |                  |
| DEC-FEB [ MAR-MAY [ JUN-AUG [  | 25<br>25<br>25   | HOURS/DA'  DAY/WEEK  WEEKS/YE                                       |  | 16<br>7<br>52   |                 |  |                  |
| SEP-NOV  | 25   |   |  |   |                 |  |                  |
| PARAMETER TYPE TYPE CODE (FRI MANUFACTURE MODEL NUMBER PRESSURE DRO WET SCRUBBER | R<br>R<br>DP (IN. OF WATER)  | MENT PRIMARY  Cyclone  075  Western Pneumatics  72  unknown  na  na |  | Filter  018  Western  unknow  na  6.36:1                        | Pneumatics      |  |                  |
|  | VENTILATION AND BUILDING   | /AREA DATA  | STA  | CK DATA   |                 |  |                  |
| ENCLOSED (Y/N<br>HOOD TYPE (FF<br>MINIMUM FLOW                                   | N)?<br>ROM APP. B)<br>V (ACFM)<br>TURE EFFICIENCY<br>SHT (FT)<br>A LENGTH (FT) |   | STACK EXIT HEI<br>STACK EXIT DIA<br>STACK EXIT GAS | ATE (KM)<br>IATE (KM)<br>:E NOTE BELOW)<br>GHT FROM GROUND LEVE | L (FT)          | 2,305<br>518.6<br>5,301.0<br>04<br>80<br>2.26<br>6,000<br>68 |                  |
|  | AIR POLLUTANT EMISSIONS e calculations on page 3-5.                            | EMISSION<br>FACTOR<br>(SEE BELOW)                                   | PERCENT<br>CONTROL<br>EFFICIENCY                   | ESTIMATED OR<br>MEASURED<br>EMISSIONS                           | ALL<br>(LBS/HR) | OWABLE EMISSI  | ONS<br>REFERENCE |
| POLLUTANT  PM  PM <sub>10</sub>  | CAS NUMBER  HOG FUEL CYCLONE/FILTE   | •   | 99+%   | (LBS/HR)<br>0.46<br>0.34  | 0.43            | 1.6  | Idaho DEQ        |
| PM<br>PM <sub>10</sub>   | HOG FUEL TRANSFER TO FUE   | 0.02 lb/ton   | 80%  | 0.53  | 0.53            | 1.17   | Idaho DEQ        |
| PM<br>PM <sub>10</sub>   | HOG FUEL BIN TRUCK LOADO   | 0.05 lb/ton   | 50%<br>50%   | 0.27  | 0.27            | 0.59   | Idaho DEQ        |
|  | TACK TYPE - 01) DOWNWARD   | · n2) VERTICAL (UNCC  | VERED); 03) VEF                                    | RTICAL (COVERED); 04)   | HORIZONTAL; 05  | ) FUGITIVE   |                  |

NOTE: STACK TYPE - 01) DOWNWARD; 02) VERTICAL (UNCOVERED); 03) VERTICAL (COVERED); 04) HORIZONTAL; 05) FUGITIVE

EMISSION FACTOR IN LBS/UNITS. PLEASE USE SAME HOURLY UNITS GIVEN IN FUEL DATA SECTION.

# SECTION 7-2: SOLID MATERIAL TRANSPORT, HANDLING, AND STORAGE

| DEQ USE ONLY  |   | r                                    |                               |
|---|---|--------------------------------------|-------------------------------|
| DEQ PLANT ID CODE  DEQ BUILDING ID CODE  DEQ SEGMENT CODE | DEQ PROCESS CODE PRIMARY SCC  | DEQ STACK ID CODE L<br>SECONDARY SCC |                               |
|   |   |                                      |                               |
| PART A: GENERAL INFORMATION                               |   |                                      |                               |
| PROCESS CODE OR DESCRIPTION                               | Sawmill Sawdust Handling  |                                      |                               |
| STACK DESCRIPTION   | Sawdust Bin Target Box  |                                      |                               |
| BUILDING DESCRIPTION                                      | 1995 DATE LAST MODIF  | FIED NA                              |                               |
| DATE INSTALLED  | 1993  |                                      |                               |
| MATERIAL DESCRIPTION                                      | Sawdust   |                                      |                               |
| MATERIAL TRANSFER RATES                                   |   |                                      |                               |
| MAXIMUM HOURLY TRANSFER RATE (UNITS/HOUR                  | R) unknown  |                                      |                               |
| NORMAL HOURLY TRANSFER RATE (UNITS/HOUR                   | ) na  |                                      |                               |
| NORMAL ANNUAL TRANFER RATE (UNITS/YEAR)                   | 106,144   |                                      |                               |
| UNITS OF MEASURE  | tons/year   |                                      |                               |
| MATERIA   | SFER - None, Sawdust is transported pneum AL MOISTURE IT (WEIGHT PERCENT) CONVEYORS IN BUILDINGS? (Y/N) TRANSFERS IN BUILDINGS? (Y/N) | WIND SPEED (MPH)  AVERAGE            | E HOURLY EED (MPH)            |
|   | ERS Sawdust Bin Vent Target Box   |                                      |                               |
| MATERIAL MOISTURE CONTENT (WEIGHT PERCENT)                | 1 45% 1   |                                      | 99+%                          |
| PRIMARY SEPARATOR TYPE                                    |   | ARATOR PERCENT EFFICIENCY            |                               |
| SECONDARY SEPARATOR TYPE                                  | SECONDARY S   | EPARATOR PERCENT EFFICIENCY          |                               |
|   | wheat truck hin   |                                      | <del></del>                   |
| MATERIAL STORAGE DATA Saw                                 | STORAGE CAPACITY  | 40 Office                            | NGTH (FT) NA                  |
| PILE? (Y/N)   | STORAGE CAPACITY UNITS  | 200 11 741111                        | DTH (FT) NA NA                |
| SILO? (Y/N)   |   | PILE HE                              | IGHT (FT)                     |
| OTHER STORAGE TYPE DESCRIPTION                            |   |                                      |                               |
| MATERIAL DATA   | HAP CAS   |                                      | FRACTION IN<br>RIAL BY WEIGHT |
| HAP DESCRIPTION   | NUMBER  | ı Γ <u></u>                          |                               |
| NONE  |   | 1                                    |                               |
| NONE  |   | 1                                    |                               |
| NONE  |   | i                                    |                               |
| NONE  |   | <u> </u>                             |                               |
| NONE  |   | <u> </u>                             |                               |
| NONE  |   | <del></del>                          |                               |

| OPERATING DATA RCENT FUEL CONSUMPTION PER QUARTER | OPERATING !           | SCHEDULE           |                       |                |                 |           |
|---|-----------------------|--------------------|-----------------------|----------------|-----------------|-----------|
|   | HOURS/DAY             |                    | 16                    |                |                 |           |
| C-FEB 25  | DAY/WEEK              |                    | 7                     |                |                 |           |
| AR-MAY 25   | WEEKS/YEA             | R                  | 52                    |                |                 |           |
| N-AUG 25  |                       |                    |                       |                |                 |           |
| EP-NOV 25   |                       |                    |                       |                |                 |           |
| POLLUTION CONTROL EQUIPM                          | MENT<br>PRIMARY       |                    | SECONDA               | .RY<br>        |                 |           |
| ARAMETER  | Target Box            |                    | None                  |                |                 |           |
| YPE   | ruigui                | - <del></del>      |                       |                |                 |           |
| YPE CODE (FROM APP. A)                            | Field Erected         |                    |                       |                | ====            |           |
| IANUFACTURER                                      | na                    |                    |                       |                |                 |           |
| ODEL NUMBER                                       |                       |                    |                       |                |                 |           |
| PRESSURE DROP (IN. OF WATER)                      | na l                  |                    |                       | ]              |                 |           |
| VET SCRUBBER FLOW (GPM)                           | na                    |                    |                       | ]              |                 |           |
| BAGHOUSE AIR/CLOTH RATION (FPM)                   | na l                  |                    | · T 5                 |                |                 |           |
| VENTILATION AND BUILDING                          | IAREA DATA            |                    | ( DATA                |                | 2,303           |           |
|   |                       | GROUND ELEVATI     |                       |                | 518.8           |           |
| ENCLOSED (Y/N)?                                   |                       | UTM X COORDINA     |                       |                | 5,300.8         |           |
| HOOD TYPE (FROM APP. B)                           |                       | UTM Y COORDINA     |                       |                | 02              |           |
| MINIMUM FLOW (ACFM)                               |                       | STACK TYPE (SEE    | NOTE BELOW)           | (ET)           | 37              |           |
| PERCENT CAPTURE EFFICIENCY                        |                       |                    | HT FROM GROUND LEVEL  | . (F1)         | 1,21            |           |
| BUILDING HEIGHT (FT)                              |                       | STACK EXIT DIAM    | ETER (FT)             |                | 6,000           |           |
| BUILDING/AREA LENGTH (FT)                         |                       | STACK EXIT GAS     | FLOWRATE (ACFM)       |                | 68              |           |
| BUILDING/AREA WIDTH (FT)                          |                       | STACK EXIT TEM     | PERATURE (DEG. F)     |                |                 |           |
|   |                       |                    |                       |                |                 |           |
| AIR POLLUTANT EMISSION                            | 5                     |                    | ESTIMATED OR          | ALL            | OWABLE EMISSION | ONS       |
| POLLUTANT CAS NUMBER                              | EMISSION              | PERCENT<br>CONTROL | MEASURED              |                | (TONS/YR)       | REFERENC  |
| POLLUTANT CAS NUMBER                              | FACTOR<br>(SEE BELOW) | EFFICIENCY         | EMISSIONS             | (LBS/HR)       | (TONS/TV)       |           |
|   |                       |                    | (LBS/HR)_             |                | E 21            | Idaho DE  |
| SAWDUST BIN VENT TARGET                           | BOX     lb/ton        | na                 | 1.21                  | 1.21           | 5.31            | Idaho DE  |
| PM  | 0.05 lb/ton           | na                 | 0.63                  | 0.63           | 2.65            | idano 22  |
| PM <sub>10</sub>                                  | 0.00                  | L                  |                       |                |                 | Lidaho DE |
| SAWDUST BIN TRUCK LOAD                            | OUT                   | 50%                | 0.61                  | 0.61           | 2.65            | Idaho DE  |
| PM  | 0.03                  | 50%                | 0.30                  | 0.30           | 1.33            | Idaho DE  |
| PM <sub>10</sub> NOTE: STACK TYPE - 01) DOWNWAR   | 0.025 lb/ton          | L                  |                       |                | o cucitive      |           |
| • • • • •   |                       |                    | TION (COVERED): 04) I | HORIZONTAL; 05 | ) FUGITIVE      |           |

# SECTION 7-3: SOLID MATERIAL TRANSPORT, HANDLING, AND STORAGE

| SECTION 7-3. GG   |   |   | - ·                        |
|---|---|---|----------------------------|
| DEQ PLANT ID CODE  DEQ BUILDING ID CODE   | DEQ PROCESS CODE PRIMARY SCC  | DEQ STACK ID CODE SECONDARY SCC                             |                            |
| DEQ SEGMENT CODE  |   |   |                            |
| PART A: GENERAL INFORMATION  PROCESS CODE OR DESCRIPTION  STACK DESCRIPTION  BUILDING DESCRIPTION  DATE INSTALLED   | Sawmill Chip Handling  Chip Bin Vent Target Box  1995  DATE LAST MODIFIED  Green Chips  | NA .  |                            |
| MATERIAL DESCRIPTION  |   |   |                            |
| MATERIAL TRANSFER RATES  MAXIMUM HOURLY TRANSFER RATE (UNITS/HOUR)  NORMAL HOURLY TRANSFER RATE (UNITS/HOUR)  NORMAL ANNUAL TRANFER RATE (UNITS/YEAR)  UNITS OF MEASURE | unknown na 250,792 tons/year  |   |                            |
| BELT CONVEYOR/VEHICLE TRANSF  NUMBER OF TRANSFERS   | MOISTURE (WEIGHT PERCENT)  CONVEYORS IN BUILDINGS? (Y/N)  TRANSFERS IN BUILDINGS? (Y/N) | AIIV.  MAXIMUM HOURLY WIND SPEED (MPH)  AVERAGE H WIND SPEE | HOURLY ED (MPH)            |
| PNEUMATIC CONVEYOR TRANSFEI  MATERIAL MOISTURE CONTENT (WEIGHT PERCENT)  PRIMARY SEPARATOR TYPE  SECONDARY SEPARATOR TYPE   | DRIMARY SEPARA  | TOR PERCENT EFFICIENCY<br>ARATOR PERCENT EFFICIENCY         | 99+%                       |
| MATERIAL STORAGE DATA Chip PILE? (Y/N) SILO? (Y/N) OTHER STORAGE TYPE DESCRIPTION   |   | Units PILE LEN' 0 ft <sup>3</sup> /unit PILE HER            | TH (FT)                    |
| MATERIAL DATA  HAP DESCRIPTION  NONE  NONE  NONE  NONE  NONE  NONE  NONE  | HAP CAS NUMBER  | HAP MATER   | FRACTION IN RIAL BY WEIGHT |